THE BUILDER

A RECORD OF ARCHITECTURE AND CONSTRUCTION.

VOL. CXIII.—No. 3886. JULY 27, 1917.

BUILDING AND ITS COST.

WHATEVER the causes may be, we cannot escape from the conclusion that at the termination of the war, and certainly for a good many years afterwards, building will cost about double what it did in 1912, and we shall have to adjust ourselves to an entirely new set of conditions in dealing with our problems. Wages have risen throughout the country, materials—especially wood and iron—will be scarce in consequence of the enormous demands both here and on the Continent, and all materials which are manufactured will probably be permanently more costly because wages have been increased. Nor is it yet clear that the fixed determination of the building trades to refuse to countenance any modified form of piecework, such as prevails in certain branches of the engineering trade, can be in any way shaken; so that no factor influencing prices is, as far as we see, likely to be modified; and the practical problem which remains is to find a *modus vivendi* under which people will be disposed to spend twice as much for the same result.

We may assume for purposes of argument that all classes of building serve a useful purpose, for the "lordly pleasure houses" which we have heard eloquent speakers allude to are few and far between in proportion to the immense mass of building which is devoted to purely practical requirements. If the "lordly pleasure houses" of the past had not been built, England would have had less interest for the democracy of to-day; and even the sumptuous hotel may and should have an architectural value commensurate with that of many public buildings and form an addition to our architecture. It would also need the services of a highly paid and expert official department to settle what buildings serve purposes of public utility and what buildings cater for the pleasure of a few, and in the end we might not gain by having attempted to discriminate between different classes of building in order to assess the amounts which their owners should pay in taxation. For the remedy, and the only remedy, which will make it possible to build in the future must take the form of relieving land and buildings from many of the heavy charges they now bear and by so doing rendering building a more attractive investment. We have referred before to the Finance Act of 1909, most of the provisions of which must be repealed, but it is even more necessary to amend the Rating Laws, as they affect buildings, partly by transferring educational and poor rates to the realm of national taxation and partly by giving the owners of land an incentive to build and develop by rating their property on a very much lower scale than at present, and by fixing the rateable value according to the area covered, irrespective of the accommodation placed upon it.

Then on the income produced from buildings in the form of rents, ample allowance should be made by means of a rebate for the creation of a sinking fund sufficient to cover the cost of rebuilding after a term of years, as well as the setting aside of a sufficient amount to cover the cost of repairs. It is only by making it absolutely clear that the building owner will not be treated as one who has given hostages to fortune, and placing him, as far as possible, in the same category as the owner of stocks and shares, that confidence can be restored and building become a really first-class investment, and it is perfectly obvious that, unless we consider building as a whole to be a superfluous luxury, means must be devised to render it a safe and attractive investment. Even with all the inducement that can be given we have to remember that the rental values of houses and other property after the war outside our great towns, in which the value of land bears a very large proportion to the value of the buildings placed upon it, will be approximately nearly doubled by the increased cost of building. As we know that many have been deterred from building in the past by its initial cost, we can safely assume that there will be less inclination to build in the future under the new conditions, and that therefore the services of the speculator will be more in request than they have been before. It follows that if the community needs the speculator, conditions must be created which enable him to work with a reasonable prospect of a return. The high rate of interest which is likely to be prevalent after the war is another element which renders it necessary to remove every possible obstacle standing in the way of building enterprise. Not only housing for the working classes, but the housing of the great majority of the remainder of the population, depends on the right solution of the question, and we hardly suppose the most ardent progressive reformer is prepared to argue that the whole of the population should be housed in buildings erected at the cost of the State. We have no idea to what extent the enormous number of buildings erected for purposes of the Ministry of Munitions, and the number of existing works which have been extended and enlarged for the same object, will meet the needs of the industrial developments which all hope will follow the conclusion of peace, but it is obvious that further developments will be necessitated sooner or later, and that it is in the interests of all that such buildings should be freed from unfair burdens.

The initial cost of buildings and the taxation they are subjected to are all a burden on industry, which, in the interests of all, should be diminished as far as possible. A prosperous undertaking should mean the payment of better wages and the sale of cheaper products, and so conduce to the greatest good of the greatest number. As we have said, the great mass of building carried on is strictly utilitarian, and we do not believe that any useful purpose would be served by an attempt to discriminate between classes of building as far as rating and other relief is concerned; the broad issue is that it is in the interests of the community that building shall as far as possible be encouraged by the removal of many of the handicaps from which it now suffers. But assuming all that we have suggested is done, it is obvious that far greater attention will have to be paid to the elimination of what is unnecessary, and this will place an even greater premium on good planning and the avoidance of waste. If it deprives our buildings of a plethora of somewhat meaningless carving and a wealth of cartouches, we believe little regret need be felt. A cartouche with a coat-of-arms or monogram used to be employed to serve a definite purpose and convey a meaning: now it is too often vulgarised by being introduced as a mere architectural accessory to be filled in with a unnecessary device. We believe well-designed and divided sash windows would frequently look far better than some of the more elaborate and complicated methods of filling in window spaces which are frequently employed, nor should we miss much of the elaborate plaster detail which is often thrown away in the design of business premises. It would severely tax the restraint of many architects to design anything as simple as Chelsea Hospital, the product of an age in which everything unnecessary was eliminated, because of the stringency of money conditions after the Fire of London; and if we are compelled by similar conditions to design on simpler lines, it is quite likely that architecture may be the gainer and not the loser by the limitations imposed by circumstances; for many of our recent buildings have been greatly "overtrimmed," or have been decked out with features which are rare and costly rather than beautiful.

NOTES.

The London Master Builders' Association.

THE Secretary's monthly letter contains, as usual, brief references to many important matters. With regard to the communications which have passed between associations of employers and the Government on the question of obtaining a refund for the additional cost of work carried out under contracts for Government work entered into subsequent to May, 1916—such extra cost arising from the grant of a second war bonus in May last—Sir Worthington Evans states that claims from contractors will be considered on the termination of the contracts if contractors can prove that, by the granting of the bonus, they have been deprived of reasonable profits on the contracts in question. Mr. Basil Peto thinks this answer is as satisfactory as is likely to be obtained from a Government department. It would be a great wrong to a most valuable section of the community if such an obvious injustice is not remedied, but we agree with the opinions expressed that the best remedy in this and other matters will only be attained by contractors with certainty when they are in a position to bring their organised weight completely into action as the men are able to by their Unions. The modern democratic government frequently gives to well-organised political pressure what it is very chary of conceding because it is obviously just and reasonable. Agitation is repugnant to the temperament of many, but without it and without thorough organisation little can be obtained, and those members of the contracting community who stand outside the associations are acting both selfishly and unwisely: selfishly because they are willing to accept benefits they are unwilling to work to obtain, unwisely because without unanimity and loyalty to the common cause little headway can be made. We hope for this reason that the London Master Builders will increase their membership, since they will need all the power they can bring to bear on the difficult times in which we live.

The Infirmary Site, Manchester.

MUCH discussion is taking place in the Manchester papers on the Infirmary site question, and Alderman James Johnston has written that though he approves of the resolution submitted by the Old Infirmary Site Committee to the effect that the committee should prepare a report on the question, he disagreed with the statement made by the chairman of the committee to the effect that, so far as he could judge, no one wanted a combined library and art gallery on the site. He makes the astounding suggestion that it will be necessary to modify the plans received, but this could be efficiently and economically carried out by the city architect! Without going into the question of the merits or professional capacity of the winner of the competition and the city architect, who was probably not even a competitor, we would ask the alderman why it is architects compete for public buildings. If he thinks they do so in order to obtain premiums he is utterly wrong, and we hold that if a municipality put the cart before the horse and obtain designs for a building they subsequently decide they do not require, the only honest course is to give the winner of the competition a direct commission to prepare designs for the building they decide they do want. There is so much misconception on the point of premiums that we often believe it would be more satisfactory if they were withheld and in their place a clause substituted to the effect that the architect placed first should be appointed architect for any building erected on the site, a clause which Alderman James Johnston would understand. Many men would regret the abolition of premiums, but after all they are not often big enough to console architects for just missing a great commission, while they too often give public bodies the opportunity of congratulating themselves on their unparalleled and foolish generosity, and when they have done so it is but a step to considering how the work can be "most efficiently and economically carried out"!

Labour Unrest.

THE commissioners appointed on June 12 to report on the causes of labour unrest, as we noted in our issue of June 22, were requested to make their reports as soon as possible, and they completed their inquiry on July 17, and the reports of the eight commissioners, as summarised by Mr. G. N. Barnes, are placed under fourteen heads as follows, in *The Times:* (1) A reduction of food prices, the deficit, if necessary, to be borne by the Government. (2) The adoption of the principles outlined in the Whitley Report, to which we referred in our issue of July 6. (3) Changes with the view of increasing output should be made the subject of an authoritative statement by the Government. (4) Labour should be partners rather than servants. (5) The greatest publicity should be given to the abolition of leaving certificates. (6) The Government should make a statement as to the variation of pledges already given. (7) The £1 maximum under the Workmen's Compensation Act should be raised. (8) Announcements should be made as to a policy of housing. (9) Skilled supervisors and others on day wages should receive a bonus. (10) Pensions committees should have a wider discretion in their treatment of men discharged from the Army. (11) Closer contact should be set up between employer and employed. (12) Agricultural wages in the western area should be raised. (13) Coloured labour should not be used in the ports. (14) A higher taxation of wealth is urged by one commissioner. It must strike anyone reading this summary that some of the recommendations are of such a character that a commission making a report within 25 days could not adequately weigh the questions. We refer especially to the fourth recommendation as to copartnership. This is a question which has occupied some of the best intellects in the country for many years; it has also been the subject of actual experiment, but not with such success as to call for its universal adoption. The lowering of food prices, the Government to be responsible for loss, is also an expedient which must be adopted with the greatest caution. There has been a vast increase in wages, and, as a matter of fact, the working classes have suffered less from the war than others, since the rise in wages and the increase in employment has enabled them to meet the increased cost of living better than most classes. The spurious lowering of food prices will hardly foster that economy which it is so essential should be exercised during the coming year. We have only time for a brief notice of the reports of the commissioners and must reserve our considered opinion for a future occasion, when we have seen the full reports.

Building and the War.

THE returns made by the local authorities in the principal urban districts in the United Kingdom (exclusive of the County of London) as to the building plans passed by them during the second quarter of this year, show a net decrease of £186,920, as compared with the corresponding quarter of 1916. The first quarter of the year showed a net decrease of £475,362, so the half year gives a decrease of £622,282 as compared with the first half of the year 1916. These are, of course, decreases on an already depressed market, for the first half of 1916 showed a decrease as compared with the same period in 1915 of £872,568, whilst the first six months of 1915 showed a decrease of £4,064,282 as compared with the pre-war half-year of 1914. These figures show one thing, and that is that the suspension of all building is not caused so much by the limitations imposed as by the war itself, for the largest decreases occurred before the legal restrictions were imposed. There is one other interesting feature in these statistics: the classes of buildings are classified as "dwelling houses, factories and workshops, shops and other business premises, churches, schools, and public buildings, and other buildings, additions and alterations." In the first half of 1915 there was a decrease in all these classes, in the first half of 1916 there was again a decrease in all except "other buildings, additions and alterations," and in the first quarter of that year an increase in "factories and workshops," but in the first half of the current year the only increases shown have occurred in connection with factories and workshops, and in shops and other business premises, the latter occurring in the second quarter just completed. Taking the first half of each of the three years under review, of course the most serious feature is the decreases shown in dwelling houses: in 1915, the decreases in the first two quarters, as compared with the same two quarters in the previous year, were £1,090,170 and £1,048,482; in 1916, as compared with 1915, £299,321 and £502,536; and in 1917, as compared with 1916, £225,652 and £161,495.

Compensation for Enemy Damage.

THE statement made by the Prime Minister to the deputation from the Committee on War Damage, that in principle he accepted on behalf of the Government the case put before him that the Government should accept liability for damage done by the enemy, is very important. It is a view we have always contended for in these columns, as the principle of insurance in this connection was an innovation we could see no justification for. The taxpayers contribute to the navy and army, in peace as well as war, as a necessary protection to the country from hostile attack. In war time it is impossible to ward off all hostile attacks, but when injury is inflicted by the enemy on private individuals it seems only reasonable that compensation should be awarded by the State. It has always appeared to us that this is a burden that should be borne by the whole body of taxpayers, and that the principle of insurance was uneven and inequitable. As regards insurance to property as provided by the present Government scheme, as we have pointed out before, the very fact that a flat rate was charged all over the country, quite irrespective of the dangers attaching to any locality, was proof in itself that it was a risk that should be borne by the community, but when insurance from personal injury is considered the case is even stronger. The Government have provided no scheme of insurance for this class of risk, and it has been left to private companies, who have varied the rates of premium after the last air raid. It is obviously most unfair that the private individual should be left to insure at rates varying with the activity of the enemy. Mr. Lloyd George has not at present made any announcement of the details connected with this change of policy, as he said a little time would be required for their consideration; but it would appear from his observations, as reported, that no distinction would be made in class, which we presume means that the wealthier classes will not be left to insure whilst the Government will only accept liability towards the poor.

FIREPLACE, COURT HOUSE, WINCHELSEA.

The Court House or Court Hall and Gaol is referred to in "The History of Winchelsea, one of the Ancient Towns added to the Cinque Ports," by William Durrant Cooper, F.S.A., published in 1850. Referring to existing Winchelsea, Mr. Cooper states that the "New Town was divided into thirty-nine quarters or squares."

"The Court Hall or Water Bailiff's Prison is situated at the N.W. corner of the eighth quarter and shows remains of considerable antiquity, the niches and arched doorways (of the south front) are evidently older than the present building, which would seem to have been rebuilt in the Tudor days, from the materials of the older building."

"Earliest documents connected with the Corporation are preserved among the Dering MSS. The first from Easter, 11th Rich. II (1388) to Easter, 12th Rich. II (1389)." The items comprise payments of salaries to the Mayor, town clerk and town sergeant; of thatching the town hall, and of 6s. 8d. for the rent of the hall. The Sergeant-at-Mace is appointed by the Mayor. He attends at and proclaims all the Courts and Assemblies. In practice, the Sergeant-at-Mace has been also gaoler, crier, water-bailiff, constable and pound driver. He has an annual allowance of £1 for taking care of the Court hall. The Mayor is elected annually on Easter Monday.

The fireplace illustrated is in the lower hall, now used as a public reading room. The upper hall, which serves as the town hall, is approached by an external staircase. It has an open timber roof and a somewhat similar fireplace, much mutilated. The Court House has, within the last few years, been put into repair.

THOMAS BATTERBURY.

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.

THE EXAMINATIONS.

WE take the following particulars from the last issue of the *R.I.B.A. Journal*;—

The Final: Alternative Problems in Design.

Instructions to Candidates.

1. The drawings, which should preferably be on uniform sheets of paper of not less than Imperial size, must be sent to the Secretary of the Board of Architectural Education, Royal Institute of British Architects, 9, Conduit Street, W., on or before the dates specified below.

2. Each set of drawings must be signed by the author, AND HIS FULL NAME AND ADDRESS, and the name of the school, if any, in which the drawings have been prepared, must be attached thereto.

3. All designs, whether done in a school or not, must be accompanied by a declaration from the Student that the design is his own work and that the drawings have been wholly executed by him. In the preparation of the design the Student may profit by advice.

4. Drawings for subjects (*a*) are to have the shadows projected at an angle of 45 deg. in line, monochrome, or colour. Drawings in subjects (*b*) are to be finished as working drawings. *Lettering on all drawings must be of a clear, scholarly, and unaffected character.*

Subject XXXIV.

(*a*) or (*b*) A BILLIARD-ROOM, 30 feet long by 20 feet wide, with fireplace at one end and large bay window at one side.

Drawings.—Plan and two sections to ½-inch scale, and details full size; one section to show scheme of colour.

(*a*) or (*b*) A LINENDRAPER'S SHOP AND SHOWROOMS over four stories above pavement, having a frontage of 60 feet to a main thoroughfare and a depth of 60 feet. It has a return frontage to side street.

Drawings.—Front elevation, section, and two plans to ⅛-inch scale; detail of entrance or principal staircase to ½-inch scale.

Subject XXXV.

(*a*) or (*b*) A PERMANENT HOSTEL FOR 25 WOMEN WELFARE WORKERS.

Site.—The site is practically level, has a frontage of 200 feet and a depth of 400 feet, and is on the south side of a main road running due east and west in a pleasant suburb of an English manufacturing city. The building line is 20 feet back from the road.

Accommodation, &c.—The welfare workers are women who have had a University education, and are engaged in a factory working on the three-shift system, but with no Sunday work. Bedrooms, dining-room, drawing-room, and writing-room are to be provided for the welfare workers, sitting-room and bedroom for the Matron, bedrooms and servants' hall for the kitchen staff, together with the necessary bathrooms, kitchen, scullery, larders, &c.

Materials.—The materials easily available are red bricks and a hard sandstone, which can only be obtained in thin beds.

Drawings.—Block plan, 16 feet to 1 inch, showing general arrangement of building, garden, &c. Plans of each floor, two elevations, and a section to a scale of 8 feet to 1 inch. Half-inch detail of part of entrance front, with one or two full-size details of masonry.

(*a*) or (*b*) ALMSHOUSES for the poor on a site 100 feet by 100 feet, facing the street in a country town, with buildings on each side of the frontage.

There must be no windows to the east and west. There must be accommodation for fourteen inhabitants, consisting of sitting-room, with cooking stove, scullery, coals, w.c., and one bedroom, and somewhere in the general plan a common reading-room and quarters for a single caretaker. The buildings generally to be two stories in height.

Drawings.—One-eighth inch scale plans, sections and elevations—2 sheets; ½-inch scale details—1 sheet.

Subject XXXVI.

(*a*) or (*b*) An ENTRANCE LODGE to a cemetery. Accommodation required, two living rooms, three bedrooms, and office for superintendent.

Drawings.—Two plans, a section and two elevations all to ¼-inch scale. Detail of entrance to larger scale.

Small scale block plan required showing position of lodge in connection with cemetery entrance.

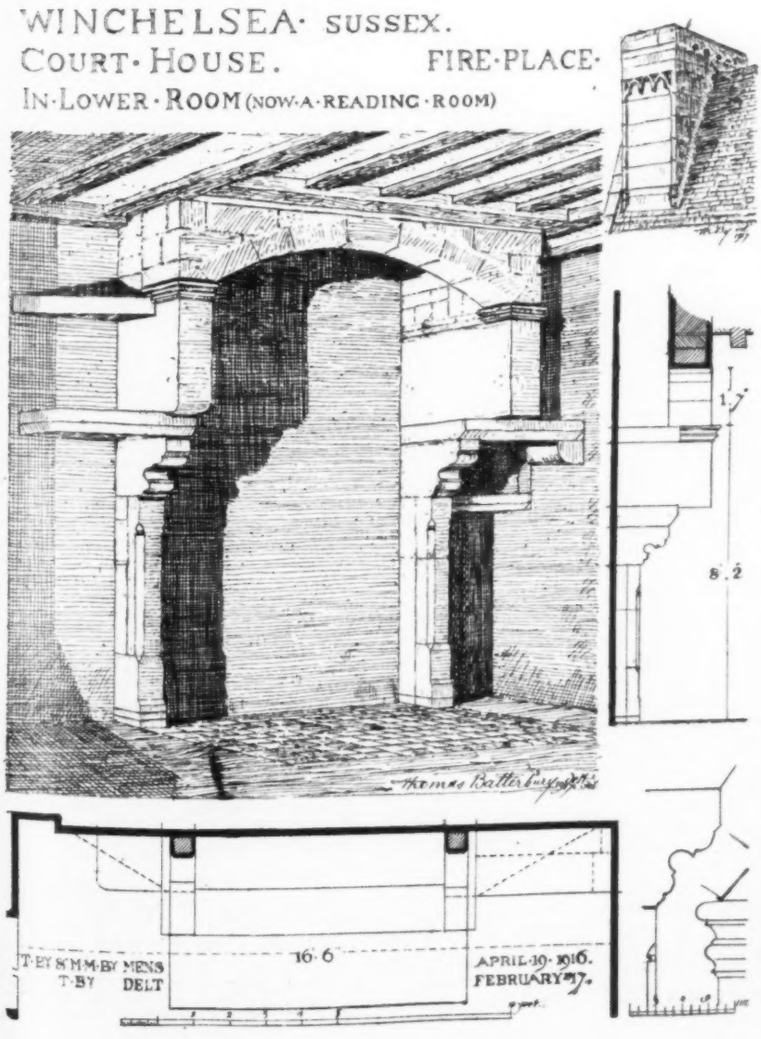
(*a*) or (*b*) HEADQUARTERS FOR O.T.C. AT A LARGE PUBLIC SCHOOL.

Draft Condition.—The buildings, for an establishment of 400 infantry cadets, are to form a detached group, sited on a low plateau overlooking the playing fields, and backed by wooded hills. The lay-out is to be on broad and dignified lines, and to include a paved parade ground, about 7,500 yards super, colonnades, and sheltered areas. The following accommodation should be provided: Drill hall, c. 7,500 feet super; two lecture-rooms; armoury, with cleaning-room and workshop; magazine; reference library; gallery for maps and models; miniature range; orderly-room; offices for C.O., Coy. Commanders and Quartermaster; storerooms for tools, equipment, and materials; locker-rooms, shower baths, &c. Common rooms for Officers, Cadet N.C.O.'s and cadets; office for Sergt.-Instructors, and quarters for one married sergeant.

Drawings.—Plans, including lay-out and key elevations to 1-32-inch scale. Sections and elevations of main buildings to ⅛-inch scale. A sheet of ½-inch scale details.

Dates for Submission of Designs in 1917–18.

	Subject XXXIV.	XXXV.	XXXVI.
United Kingdom	Aug. 31	Oct. 31	Dec. 30
Johannesburg ..	Oct 31	Dec. 30	Feb. 28
Melbourne ..	Nov. 30	Jan. 31	Mar. 31
Sydney	Nov. 30	Jan. 31	Mar. 31
Toronto.. ..	Sept. 30	Nov. 30	Jan. 31



GENERAL NEWS.

Appointment.

Mr. H. P. Burke Downing, F.R.I.B.A., has been appointed the Diocesan Surveyor for the Diocese of Chichester, in succession to Mr. Lacy W. Ridge, F.R.I.B.A., who has resigned, having held the appointment since 1871.

The Late Sir S. R. Binnie's Estate.

Sir Alexander Richardson Binnie, of Ladbroke-grove, Notting Hill, late chief engineer to the London County Council, has left estate to the value of £10,335.

Department of Scientific and Industrial Research.

The transfer of the offices of the Department of Scientific and Industrial Research (including the Fuel Research Board) to No. 15, Great George-street, which is nearly opposite to the Department's present offices, will take place on the 23rd and 24th inst. There will be no change in the telegraphic address, which will remain "Resciendus, Parl., London," and the official telephone number will be, as before, Victoria 7940 (2 lines).

The Church Building Society.

The Incorporated Church Building Society holds its usual monthly meeting at 7, Dean's-yard, Westminster Abbey on the 19th inst. the Hon. Sir E. P. Thesiger, K.C.B., in the chair. Grants of money were made in aid of the following objects:—Building the new Church of St. Mark, Howdale, Yorks., £25; repairing the Churches at Bethnal Green, S. Jude, £35; North Tidworth, Holy Trinity, £15; and Wennington, S. Mary and S. Paul, Essex, £50; grants of £100 were paid towards the enlargement of the Church of S. Joseph, Cwaman, S. Wales, and one of £25 towards the repair of the Church of All Hallows, Dean, Hunts. Applications were considered for aid towards erecting temporary mission churches and hostel chapels in certain munition areas. These were met by substantial grants amounting to almost the total sum available from the special fund now being raised by the society.

The Late Mr. A. M. Broadley's Masonic Collection.

The late Mr. Broadley's collection which was purchased at auction last June for £370, by Mr. Dring, of Quaritch's, is now housed in the library of Grand Lodge. It forms a "grangerised" copy of Anderson's "Freemasonry in the Eighteenth Century," arranged in five volumes imp. fo., and including more than 800 views, portraits, drawings, autograph letters, and so on. One of the views, by G. R. White, is "A prospect of the hospital called Bedlam. . . . begun in April, 1675, and finished in July, 1676," as then newly erected in Moorfields, on the north side of the London Wall, and designed by Robert Hooke. The building replaced the priory and hospital founded in 1246, by Simon Fitz-Mary, sheriff, in the parish of St. Botolph, Bishopsgate, for canons and sisters who wore for badge the Star of Bethlem.

The National Gallery of British Art.

The following letter has been sent to the Lords Commissioners of His Majesty's Treasury and we have been asked to publish it:—

"We, the undersigned, being representatives of the leading Royal and other important art institutions throughout the country, desire to call your attention to the dissatisfaction of the general body of artists with the composition of the new Board appointed to manage the affairs of the National Gallery of British Art (Tate Gallery). In view of the importance of the decisions of this body to the future welfare of British art, we regard with gravest misgiving the absence of members directly and adequately representing the artists of this country. . . . Edward J. Poynter, President, Royal Academy; Frank Brangwyn, President, Royal Society of British Artists; Frank Short, R.A., President, Royal Society of Painter-Etchers and Engravers; Thos. Brock, K.C.B., R.A., President, Royal Society of British Sculptors; Dermod O'Brien, President, Royal Hibernian Academy; Cuthbert Grundy, President, Royal Cambrian Academy; T. C. Gotch, President, Royal British Colonial Society of Artists; Lota Bowen, President, Society of Women Artists; J. J. Shannon, President, Royal Society of Portrait Painters; David Murray, R.A., President, Royal Institute of Painters in Water Colours; Alfred Parsons, R.A., President, Royal Society of Painters in Water Colours; E. A. Walton, R.S.A., President, Royal Scottish Society of Painters in Water Colours; J. Coutts Michie, Vice-President, Aberdeen Artists' Society; Robert Home, President, Society of Scottish Artists; Alfred Drury, President, Society of Artists, Birmingham; E. Rimbault Dibdin; President, Museums Association; Frank Walton, President, Royal Institute of Oil Painters; Janet Stancomb-Wills, President, Royal West of England Academy; Nellie M. Hepburn Edmunds, Vice-President, Royal Society of Miniature Painters; A. S. Hartrick, Acting President, Senefelder Club; S. Melton Fisher, Chairman, Pastel Society; L. Kemp-Welch, President, Society of Animal Painters; Michael Simons, President, Royal Glasgow Institute of Fine Arts."

The Royal Free Hospital.

St. Pancras Borough Council has given 2,900 square feet of St. Andrew's, Holborn, public garden, in exchange for some adjacent land, for an extension of the Royal Free Hospital in Gray's Inn-road. The hospital was founded in Greville-street, Hatton-garden, 1828, through the exertions of Dr. Marsden, as a medical charity to which poverty and sickness should be the only claims needed for relief. The institution was removed fifteen years afterwards into what had been the barracks and stables of the City Light Horse Volunteers. The north, or "Sussex" wing was rebuilt in 1855; the south and east blocks in 1877–9. In 1899 the old front—which had formerly been the barracks—gave place to a range of buildings erected after Mr. W. Harvey's designs, for staff residential quarters, isolation wards, board-room and offices, casual ward, and laundry; the burial-ground on the north side of Wells-street, belonging to St. Andrew's, Holborn, was taken over by the St. Pancras Vestry in June, 1885, for public resort.

Lands and Buildings Reconstruction.

The following letter has been received by the Surveyors' Institution from the Lands and Buildings Reconstruction Committee, War Office, 4, Whitehall Court, S.W. 1:—

"SIR,—The Lands and Buildings Reconstruction Committee appointed by the Army Council is now engaged upon the preparation of a complete schedule and valuation of all lands and buildings in the occupation of the War Department. The Committee is also collecting information for the purpose of making recommendations as to the disposal of those lands and buildings which will no longer be required for military purposes, and of advising upon the expediency in certain cases of purchasing rather than reinstating properties. For this purpose it is desirable that the information in the hands of the Committee shall be as complete as possible, and that the requirements and interests of other Government departments as well as those of public bodies may be fully considered by the Committee before they make recommendations. A Committee has also been appointed by the Ministry of Munitions for a somewhat similar purpose. In due course complete plans and particulars of all lands and buildings in the occupation of both the War Department and the Ministry of Munitions will have been prepared and scheduled at the Record Office of the Committees here, and I shall be pleased to afford every information that your Society may require. If, in the meantime, members of your Society are aware that any properties of either of these departments are likely to be required for any particular purpose upon the conclusion of peace, I shall be glad if you will kindly let me know.—I am, yours faithfully,

"F. TUDSBERY, Major, *Secretary*."

BOOKS.

The Italian Orders of Architecture. By CHARLES GOURLAY, B.Sc. (London: Edward Arnold.)

THIS is an attempt to produce a little book on the Orders which will be of use to decorators and designers, but the author has, we think, made a mistake in devoting a book to the Italian Orders and at the same time following the precedent of no one Italian master. Like Chambers, he says, "the proportions of the Orders shown are those commonly accepted, and as regards detail no one master or author has been exactly followed." It is true that Chambers claims more—that as he has corrected the errors into which the Italian masters fell, his own Orders may be regarded as the best ever designed; but we believe that a new edition of the Orders according to Vignola or Palladio would form a better illustration of the Italian Orders than an attempt to combine or fuse the strong points of each, a feat which was hardly achieved with full success by Sir William Chambers!

We prefer the consideration of the Order alone to the method adopted in this book of showing it in combination with an arch and pedestal, as the former method would seem to be clearer and simpler for a beginner; but the book will serve a useful purpose, though it rather fails because it is neither devoted entirely to the Orders nor to their application in existing buildings and compositions. The twenty-nine pages of letterpress again are taken up with short paragraphs which are neither a glossary nor a historical description, but a set of short and somewhat uninteresting statements. Thus we have: "*Architecture.*—The title architecture is applied to those buildings which indicate by the excellent qualities of their design that they are works of fine art." "*Scale.*—The term 'scale' refers to the relation of the parts to the whole as regards size." A paragraph of some eighty words deals with stone jointing, which could not be adequately dealt with in less than several pages and which need not be referred to at all in an elementary work on the Italian Orders. In a word, the whole of the book seems ill-composed and fragmentary in its construction, and we feel that a small volume based on Palladio or a series of scale illustrations of the Orders as applied in historical Italian buildings would have been of more use to the student and certainly of more interest to those interested in architecture; but, as Mr. Gourlay is Professor of Architecture and Building at the Royal Technical College, Glasgow, he may have adopted a method which fulfils some special object we are ignorant of.

The City Churches. By MARGARET E. TABOR, with an introduction by L. COPE CORNFORD. (Headley Bros., Ltd.)

THE City churches have been so often and so fully described that any new book on them has to be justified by some outstanding merit or some feature of unusual interest. This book is illustrated by some good photographic illustrations and two good and clear maps, one showing the City churches and the other London in the thirteenth century. The book itself belongs to that indeterminate category of works which have their place between a guide book and an elementary work on a phase of architecture. It traverses in shorter space a subject already well covered by Daniell and other writers, without supplying what they are wanting in data and criticism, which can only be supplied by a writer having adequate architectural knowledge. Should it serve, as it may, to direct more attention to a fascinating subject, it will have served a useful purpose. It is well printed and pleasingly bound.

Books Received.

NAVAL ARCHITECTURE. Part I. By J. E. Steele, B.Sc. (Cambridge University Press. 5s. net.)

NOTES ON THE MANUFACTURE OF EARTHENWARE. By Ernest Albert Sandeman. (London: Crosby Lockwood & Son.).

LAW REPORTS.

The East-End Explosion.

Builders Too Busy to Repair.

A SEQUEL to the explosion in the East End occurred in the Bow County Court on Tuesday before his Honour Judge Graham, K.C., when Mrs. Frederica Volland, of 3, Cambridge-park, Wanstead, sued Mr. Isaac, a master mariner, of 294, Victoria Dock-road, Canning Town, to recover £9 12s. due for rent.

There was a counterclaim for breaches of implied covenant to keep the place in repair, by which defendant had sustained £17 7s. 6d. damages. He asked for five sets of Venetian blinds 12s. 6d.; for a charwoman £1; linoleum 15s.; canvas 10s.; washing articles £1; bedcovers £1; gas and fires necessitated by dilapidations 50s.; loss of lodgers, 10 weeks, £10.

Mr. A. A. Robinson appeared for the plaintiff, and Mr. Cowl for the defence.

In opening the case, Mr. Robinson said the claim was for rent of this house, which defendant had refused to pay owing to the repairs not being carried out at once he alleged. He read a letter from Mr. A. H. Dennis, Solicitor to the Treasury, under date of July 16:—Dear Sir,—The Ministry of Munitions have referred to me your letter of July 10 in the matter of the actions by Mrs. Volland for recovery of rent from three of her tenants in the Victoria Dock-road. I am instructed, in reply, to explain the position of the Ministry in the matter, as it is understood that it is desired that some indication of the view taken by the Ministry should be before the Court. Grants are only made by the Ministry after consideration of all the circumstances of each case, and it is not possible for the Ministry to pledge themselves in advance as to what will or will not be paid in particular cases. I am to point out, however, that in the present cases, as you are no doubt aware, grants have already been made, without admission of liability, to two of the three tenants in question, namely, Copp and Isaac, to cover the damage sustained by them, and that they have agreed that these payments represent the total amount of their loss, consequential or otherwise, which has resulted or may result, directly or indirectly, in consequence of the damage caused in or upon their premises, and have undertaken to accept these sums in full discharge of all claims in respect of such damage; and that an arrangement has been arrived at with Mrs. Volland as to the amount to be paid to her in satisfaction of her claim. There are no other claims by Mrs. Volland or these three tenants before the Ministry, but if additional circumstances (not taken into account when the above grants were determined upon) should arise, making a further grant reasonable in any particular case, the Ministry would not consider themselves debarred by the foregoing from making such grant. You may, of course, make such use of this letter as you may desire before the Court."

Mr. Robinson said his case was that the plaintiff had done the best she could under the circumstances, there had been no delay, and that the defendant had been compensated.

Mr. Stern, the agent for the collection of the rents, said the explosion was on January 19, and he gave orders at once for the repairs to be done. He believed the glass was put in in March, but the frames were started on February 1. He could not say any particular dates as to when the repairs were carried out, as there were 300 houses to attend to. There was a tremendous difficulty in getting glass and labour but the best for everybody was done under the circumstances. He was unaware that it was sixteen weeks before the repairs were completed. In cross-examination he agreed, however, that it was only the week before last that the doors were put in, as there was such a difficulty in getting timber. The defendant agreed to pay the rent so soon as the glass was put in, but so soon as this was done he wanted the rest of the repairs carried out. He agreed the defendant had been in the house for six years, and eleven in another.

Frederick John Wise, clerk to Mr. Stern, said he had instructions to do the dangerous work at once, which he gave to the builder. The order was given to the builder the day after the explosion, and the work was started in the February. He agreed that of course the place was not fit for habitation after the explosion, as the windows were completely blown out, sashes and all, but there were lots and lots of houses as bad, if not worse, hundreds of them.

Harry Geo. Hicks, a builder, of 166, Butchers-road, Tidal Basin, was called, and stated that he got the order to carry out the repairs to forty-eight of Mrs. Volland's houses, and forty-nine of a Miss Ball. He had great difficulty in getting labour, window sashes, and particularly glass, but he did the best he could under most difficult circumstances. He had to do a bit here and a bit there to keep people from kicking up a row. He considered he did it with great expedition in view of not being able to get hands. He agreed that sashes put in did not keep the windows watertight. Since this explosion he had really had too much work to do; it was a great worry.

This closed the case for the plaintiff.

For the defence, Mr. Isaac gave evidence, and said that three weeks after the explosion, as nothing had been done, he went to Mr. Stern, who referred him to Mr. Hicks, and he said at that time he knew nothing at all about it. He was claiming, for one thing, for the cost of firing until the middle of March, a very reasonable claim he considered, as they had to keep the gas and firing going as there were no windows in. Even when the sashes were put in the biting wind whistled in, as they were not mortered up. As it was at first done, they might just as well have put a piece of glass in a field. (Laughter.) Asked as to the claim for the loss of lodgers, he amazed the Court by saying that on the day of the explosion they had five lodgers from whom they were drawing £2 4s. a week, although there were only six rooms and a kitchen in the house and the rent was only 12s. He and his wife had had to live in the kitchen and a bedroom. The lodgers cleared out at the time of the explosion—one not even waiting to take his "traps" with him—and would not come back until the repairs had been carried out. He agreed that their leaving was entirely due to the explosion, for which he had been compensated, but their staying away was owing to the landlady not carrying out her part and doing the repairs. The damage done to the articles he was now claiming for was caused by the wind, rain and so on beating in at the open sashes. As to the loss from the lodgers they had drawn as much as £3 a week from them.

Mr. Robinson: It is amazing, and there is such a thing as overcrowding.

Defendant went on to say that he made a claim against the Ministry of Munitions for £13 for articles of furniture damaged and so on, and was paid in full. He had no idea that the document he signed was in full settlement of the claim then, and any that might arise. He wanted to claim for the loss of his lodgers at the time, but was told that he could not, as it was an entirely different case altogether. He agreed that the explosion was terrific, and that it was a wonder there was anybody left alive in the area. He was 2½ miles away up the mast of a ship and bricks flew past his head.

Mrs. Isaac gave evidence, and bore out her husband as to the money they could make out of this house. It was a good letting locality, opposite the station, and convenient. She had never been asked to get out as the place was so badly knocked about; but even if she had, there was not another house to be found.

Mr. Robinson: There must be plenty about if you looked for them.

Defendant: I'll give you a £10 note if you can find a house within a mile and a-half.

Witness went on to say that she had always been willing to pay the rent from the time the repairs were finished in May.

Mr. Robinson: Nothing has been paid yet.

Mrs. Isaac: It was refused.

Witness: It was never offered to me.

Mr. Cowl then addressed his Honour, and said he agreed that the profits made out of letting lodgings were very large in this district, but it did not alter the fact that they were made. His position in the matter was that this damage had been occasioned by the long delay of the plaintiff in getting the repairs done. The articles of clothing, linoleum and canvas, now claimed for were not damaged by the explosion, but the things had been used to keep out the rain from the open casements. The question for his Honour, he submitted, was the amount of damage these people were entitled to receive for the unreasonable delay of the landlady in having the repairs carried out.

In replying, Mr. Robinson said this was not a case of sympathy, but one purely of law. If it was a case for sympathy, then that had been dealt with by the Ministry of Munitions in a generous fashion. The Government had recognised that the explosion had occurred where Government work was being carried out, and they had said, "We will pay all reasonable claims with a denial of liability." He had read the letter also in which they said they were willing to consider further claims, although they had actually made a final settlement. Supposing this place was not habitable, then these people need not have stayed in it unless they had liked. Then, again, would anybody believe the fantastic story told of the profits made out of letting lodgings? These people had been compensated, and if they considered they were entitled to anything more, then there was the Ministry of Munitions to go to. It was quite clear that if there was any delay in the repairs, it was no fault of the plaintiff, but was due to conditions prevailing.

Judge Graham reserved his decision.

Traveller's Order for Paint.

At Shoreditch County Court, recently, Judge Graham, K.C., heard an action in which Messrs. Lewis Berger & Sons, Ltd., of Morning-lane, Homerton, paint manufacturers, sued A. W. Payne, of 14, Linden-road, Muswell-hill, a builder and decorator, to recover 11s. 6d. for paint supplied. Mr. Rule, who appeared for the plaintiffs, said the order was taken by the plaintiffs' traveller, paint to the amount of £3 11s. 6d., being arranged for. In that order were two seven-pound pots of signal red, ordered from a number. This was in September, but when the paint was delivered, the defendant denied having ordered it, and said he should send it back, which however, he never did. The plaintiffs spoke to their traveller, who said he was sure as to the order, but rather than cause trouble to a customer they wrote telling him they would take it back, and asked him to put it on Carter Paterson, carriage forward. He later paid £3, and when pressed for the balance, said he had written to them to come and take it away, but they did not, and he did not see that there was any onus on him to return goods that were sent to him and he had not ordered. All the same, he suggested that he might return them which he had never done.

Mr. Richard Edwin Simmons, the traveller, was called and proved taking the order for the signal red. He knew that after the paint was objected to, the van was sent on a number of occasions for the pots of paint, but could never catch him in. He said he had not got the order with him when asked to produce it by the defendant, but knew it was at the works. The defendant gave evidence and said he gave an order for a quantity of green paint, and was then asked to make it up to a cwt., and from the traveller's colour book he ordered some brown. When signal red came in he refused it, as it was never used by him. Again, the price he was paying was 2s. 9d. a pound, as against 5s. 6d. charged for this, which proved to him they were trying to impose a colour on him he did not want. It was really never used by house decorators at all, only by those who painted signals or letter boxes. Plaintiffs denied this and said it was largely used by decorators, and was extensively used in the defendant's own district. The defendant concluded by saying he could not understand the order not being produced. Judge Graham said there was no proof, as no order had been produced, and entered judgment for the defendant. The defendant asked for his costs and his Honour said he was entitled to them.

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ILLUSTRATIONS.

OUR inset illustrations include a drawing of Malines Cathedral, by Mr. Briant A. Poulter; four examples of Indian houses, in illustration of the first of three articles on "The Indian House," which appears on page 53; two drawings of St. Mary Abchurch, E.C., measured and drawn by Mr. Gilbert Gl. Tyte, A.R.I.B.A., ; and a cottage at Chipstead, by Mr. G. Blair Imrie.

CORRESPONDENCE.

Project for a Monument.

SIR,—Referring to Mr. E. W. Jenning's letter which appears under the above-named heading of your last week's issue, and in which your correspondent said that in his own views my project is open to rather severe criticism, inasmuch as he thinks it departs from general rules, may I reply shortly as follows:—

1. The portico is used as an entry and should not be made to dominate the rest of the edifice.

2. The figure which surmounts the monument must very obviously be to a larger scale than the lower figures to counteract the height at which it is placed; the importance of, say, the central figures in a scheme surely should be allowed to be reflected in their size; e.g., the memorial to Queen Victoria by Sir Thomas Brock, R.A., and Sir Aston Webb, C.B., fronting Buckingham Palace, where the seated figure of the Queen is to a noticeably larger scale than the symbolic figures which occur at the same level in other parts of the monument.

3. A pilaster seems to be defined as a square or rectangular projection from a wall surface, having a base and capital similar to a column. There is no pilaster to be seen in any part of the actual monument.

L. COPPÉ,
Belgian Architect.

Victoria and Albert Museum.

Last year the Victoria and Albert Museum obtained the painted bedstead, with its original Indian cotton hangings, which was made between 1770–1775 for David Garrick's villa at Hampton. The bedstead was presented by Mr. H. E. Trevor, a descendant of David Garrick's brother George, and now, through the generosity of this gentleman, with the co-operation of some admirers of David Garrick, the Museum has secured the rest of the contemporary furniture, which was made for the Hampton bedroom. These consist of three wardrobes, a corner cupboard, a basin stand, a dressing-glass and five chairs. With the exception of the dressing-glass, all the furniture is decorated in green and yellow, in the same manner as the bedstead, some pieces having designs of Chinese figures and landscapes. The dressing-glass is supported by snakes in carved and gilt wood, and is decorated in a style designed to suggest Dresden china. Apart from its historic interest, the furniture presents an attractive scheme of decoration which should be useful to modern artists and decorators. It is at present exhibited in Room 57 of the Woodwork Galleries of the Museum.

OBITUARY.

The late Mr. Chatfeild Clarke.

The last sad ceremonies were performed in connection with the late Mr. Howard Chatfeild Clarke on Monday of last week. The funeral service was held at Essex Church, The Mall, Kensington (which was erected from his designs some years ago), and was attended by from 300 400 friends and relatives. The family mourners included the widow, his sons, Mr. H. C. C. Clarke (R.F.A.) and Mr. D. C. Clarke, his daughters and his brothers, including Sir Edgar Chatfeild Clarke. The staff of his office also attended.

The interment afterwards was at Highgate Cemetery. Amongst the large congregation were two Vice-Presidents of the Surveyors' Institution, Mr. G. H. Oakley and Mr. J. H. Sabin, and the Secretary, Mr. A. Goddard, who also attended as Hon. Secretary, Professional Classes War Relief Council, in respect of which Mr. Chatfeild Clarke had been Chairman of the Finance Committee. Among the members of the Council of the Surveyors' Institution present were:—Mr. Leslie R. Vigers, Mr. Edwin Savill, Mr. Dendy Watney, Mr. George Corderoy, Mr. H. M. Cobb, Mr. C. Herbert Bedalls, Mr. Stanley Hicks, Mr. Howard Martin, Sir Alexander R. Stenning and Mr. Percivall Currey (Hon. Secretary). There were present also:—Mr. H. Courthorpe Munroe, K.C., Mr. Douglas Mathews, Mr. Fitzroy Doll, Mr. J. Arthur Steward, Sir Wrench Towse, (Clerk to the Fishmongers' Company), the Master of the Cordwainers' Company, and Mr. C. H. Waterland Mander (Clerk), Sir L. C. Agnew, Sir John Brunner, Bart., Mr. J. F. L. Brunner, M.P., Sir Matthew I. Joyce. Sir Henry Paget Cooke, Lieutenant-Colorel P. Walter d'Alton, Mr. Hilton Nash, and Mr. Seagar Berry (Ministry of Munitions), Mr. Edgar Worthington (Secretary of the Institution of Mechanical Engineers), Mr. John W. Simpson (Past President of, and representing, the Royal Institution of British Architects), Mr. Banister Fletcher, Mr. Leonard Horner, Mr. F. T. Verity, Mr. W. J. M. Burton, Mr. J. F. Nettlefold (Chairman of Courtaulds, Ltd.), Mr. R. A. Ellis, Mr. W. E. Clifton, Mr. Campbell Jones, Mr. W. G. R. Bousfield, Mr. Robert Driver, Mr. G. A. Lansdown, Mr. R. Mortimer Montgomery, K.C., Mr. Westbury Preston, Mr. H. M. Stanley, Mr. Basil Mott, Mr. Claud Fraser, Mr. H. M. Jonas, Mr. R. B. Mann, Mr. A. Burnett Brown, Mr. E. W. Rushworth, Mr. Adam Smith, Mr. G. P. Nash (Hall, Beddall & Co.), and many others.

Captain Hammond, M.C., H.A.C., M.S.I.

Captain Ernest William Frost Hammond, Honourable Artillery Co., was the youngest son of Mrs. J. H. Hammond, of Dollis-road, Finchley, and the late Alfred Hammond, of No. 25, Bedford-row. His death is now reported; he was 27 years of age. He was educated at Woodbridge School, Suffolk, and became a member of the Surveyors' Institution. He joined the H.A.C. in 1911 and with them went to France, where he soon gained a commission, and received the Military Cross for conspicuous gallantry during a bomb-fight in Sanctuary Wood on September 30, 1915; he returned to the front in October last. A brother officer writes:—"He occupied a special place in our affections. A true friend, a good soldier, and a gallant gentleman."

Second-Lieutenant L. Solomon, K.O.S.B.

Second-Lieutenant Leonard Solomon, who fell on April 23, aged 32 years, was a son of Mr. Lewis Solomon, F.R.I.B.A., of No. 21, Hamilton-terrace, N.W. He was educated at University College School, London, Cheltenham College, and the City and Guilds Engineering College, South Kensington. Shortly before the war broke out he went to Canada, and on the day war was declared joined the Dominion forces, but was pronounced to be "medically unfit." He, however, underwent an operation in order to qualify for active service, came to England, and obtaining a commission, went to the front line in last December. He was an Assoc. M. Inst. of Electrical Engineers, and bronze medallist, Royal Drawing Society.

Second-Lieutenant Pretyman, R.E., A.M.Inst.C.E

Second-Lieutenant Maurice Pretyman, R.E., wounded on August 10, 1915, on the heights of Chunuck Bair, Gallipoli, and now "presumed dead," aged 28 years, was the eldest son of Mr. and Mrs. Pretyman, of Five Ways, Torquay. He was educated at Marlborough, where he was captain of "the eight," and University College, London, and became an Assoc. M. Inst. C.E. He was employed in the construction of the Immingham Docks and upon the Admiralty engineering staff, Rosyth Naval Base; he then entered the service of the Foundation (Engineering) Company, U.S.A. He returned to England on August 3, 1914, and next day he joined the Inns of Court O.T.C., and in four weeks was gazetted to the R.E.; he was posted to the 10th Signal Company and landed with the 10th Division at Anzac, Gallipoli, on August 6th, 1915.

Second-Lieutenant C. L. Wright.

Second-Lieutenant Cecil Laurence Wright, R. G. Artillery, who fell in action on July 7, aged 33 years, was the elder son of Mr. and Mrs. Richard Wright, of The Lyntons, New Malden, Surrey. He became a member of the Architectural Association in 1903, and in 1910 was elected an Associate of the Royal Institute of British Architects.

Mr. D. Barclay.

Mr. David Barclay, F.R.I.B.A., Glasgow, died at his residence, Laventille, Crow-road, Jordanhill, recently. A member of the firm of H. & B. Barclay, he was a native of the city. In collaboration with his brother he was the architect for the municipal buildings of Greenock and also for the Glasgow Academy buildings. As a school architect he undertook a wide range of work, an example of which is the building of the Royal Technical College in George-street, his plans for which were selected in competition. A number of churches in the city and other public buildings were also designed by him. He was a Fellow of the Royal Institute of British Architects, past President of the Glasgow Institute of Architects, a governor of the Glasgow School of Art, a vice-president of Glasgow Art Club, and a member of the Royal Glasgow Institute of the Fine Arts. He was over 70 years of age, and was a member of the Incorporation of Masons.

Mr. H. B. Sanders.

We regret to record the death of Mr. Harold B. Sanders, which occurred on the 3rd inst. at his residence, "Carn Brea," Streatham. Mr. Sanders was for the past nineteen years a member of the firm of Messrs. Selby & Sanders, Quantity Surveyors, of 2, Millbank House, Westminster (late of Caxton House, Westminster), and was a member of the Quantity Surveyors' Association.

Mr. T. Stewart.

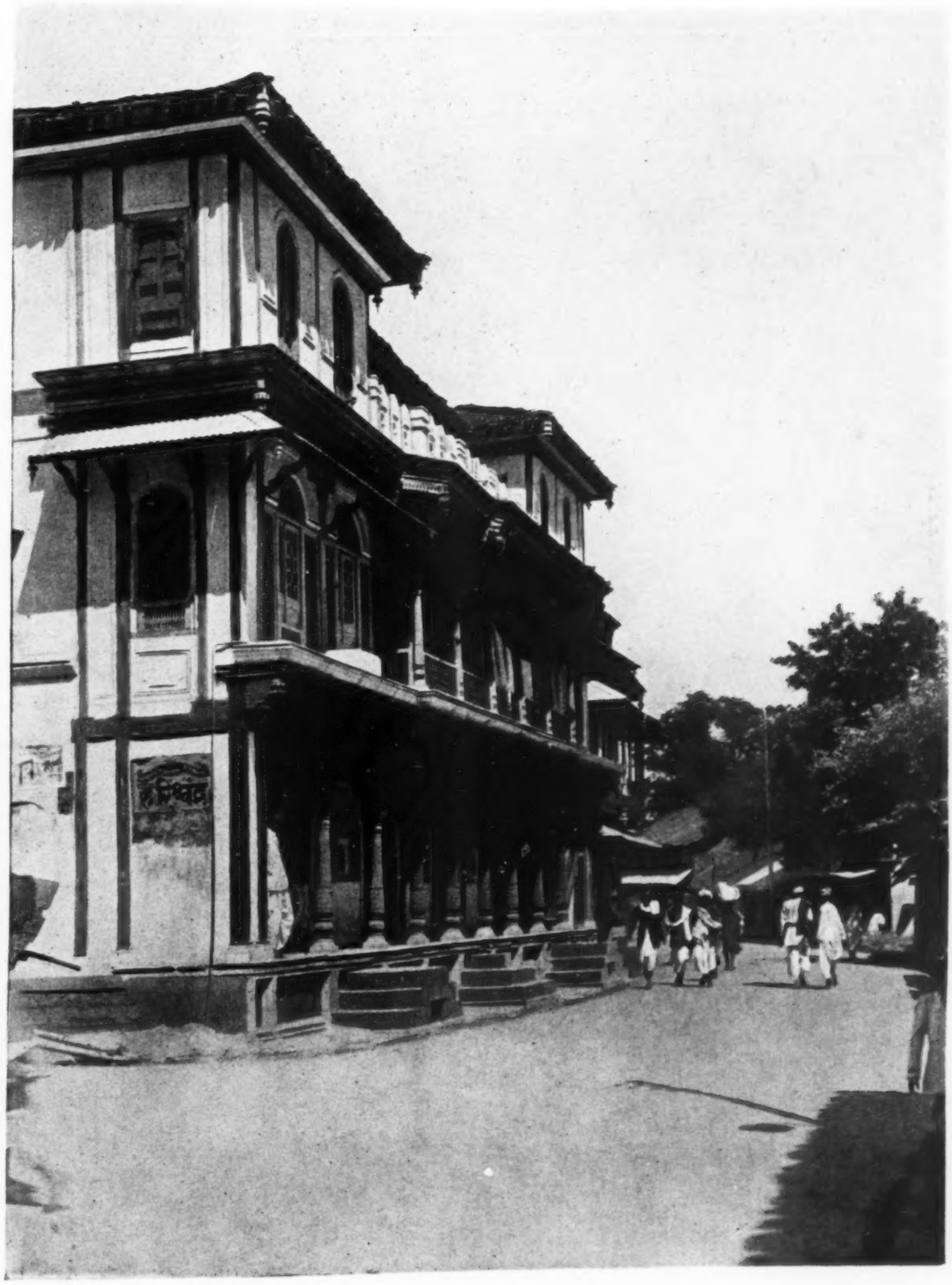
Mr. Thomas Stewart, who was well known in Glasgow building circles, died at his residence, Burnbrae, Helensburgh, recently. In partnership with a brother Mr. Stewart at one time carried out large building operations, principally on the south side of Glasgow. He continued in business on his own account up till a few years ago.

The Hope Heirlooms Sale.

Messrs. Christie will dispose of the heirlooms owned by Lord Francis Hope, of "Deepdene," Dorking, in the course of this month. The collections comprise the library of books upon archaeology and art that belonged to Thomas Hope, the author of "The Costume of the Ancients," "Household Furniture and Decorations," and "Historical Essays on the History of Architecture," and include the original drawings of Flaxman's Dante and Homer, Havell's Views, and a magnificent copy of the Cabinet du Roi, in 23 vols., fo. The sale extends also to specimens of faience, furniture, old English and foreign silver, pictures, and Roman, Greek, and Egyptian antiquities, with the Hope "Athene" by Pheidias.

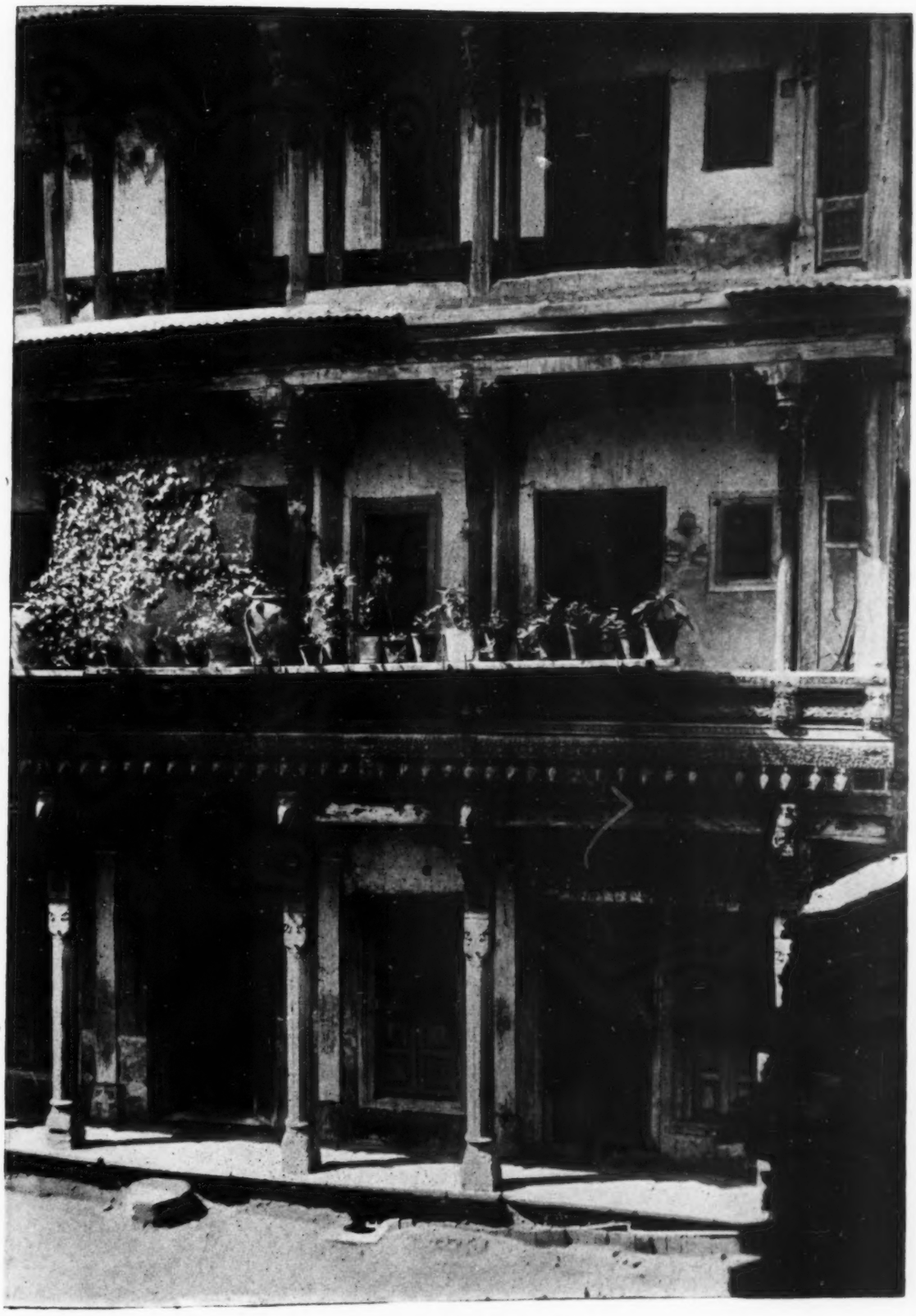
MALINES CATHEDRAL.—By Mr. Briant A. Poulter.

HOUSES, LASHKAR, GWALIOR.

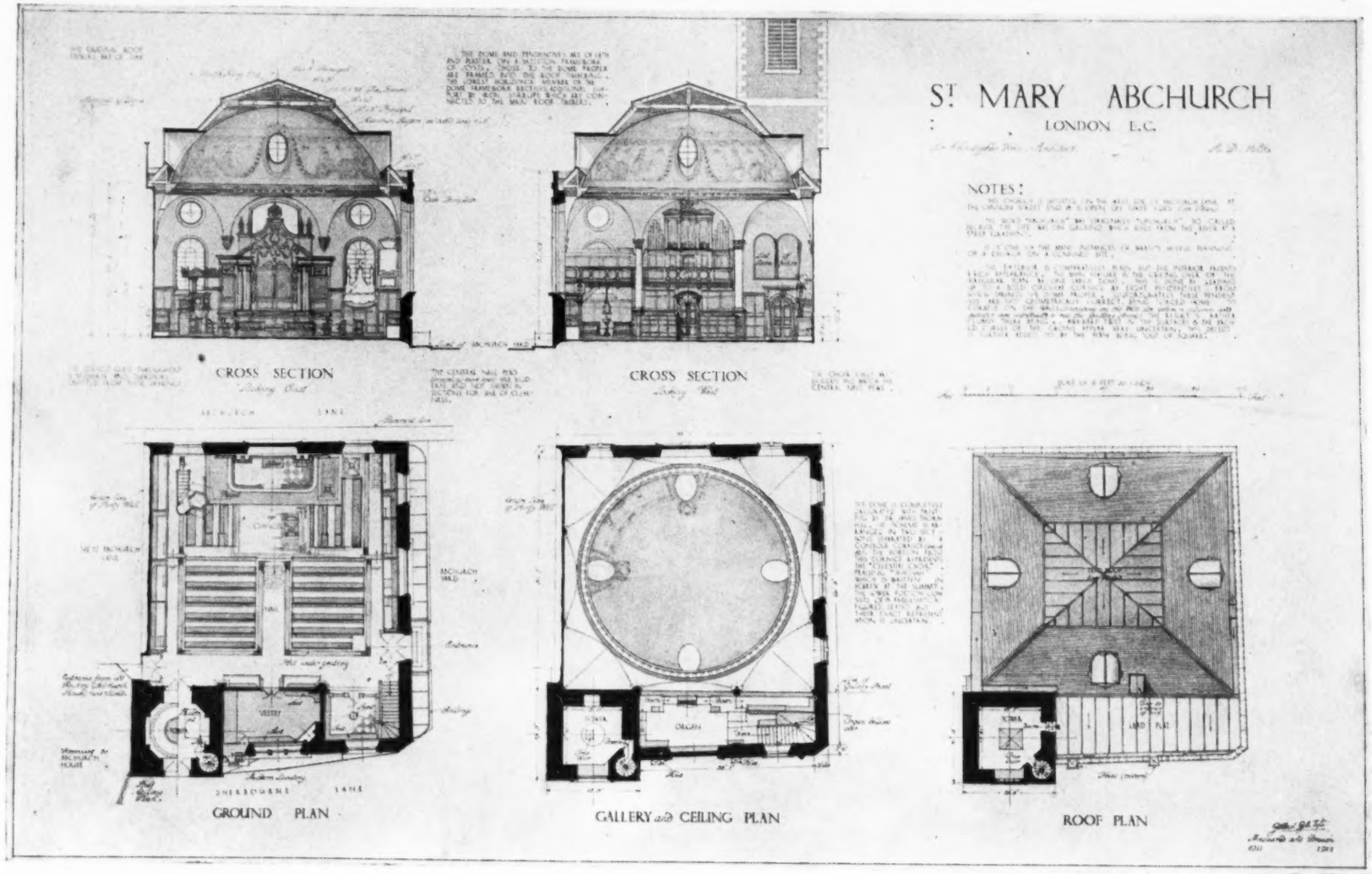


HOUSE AT NAGPUR.

HOUSES IN BARODA CITY.



HOUSE IN BARODA CITY.



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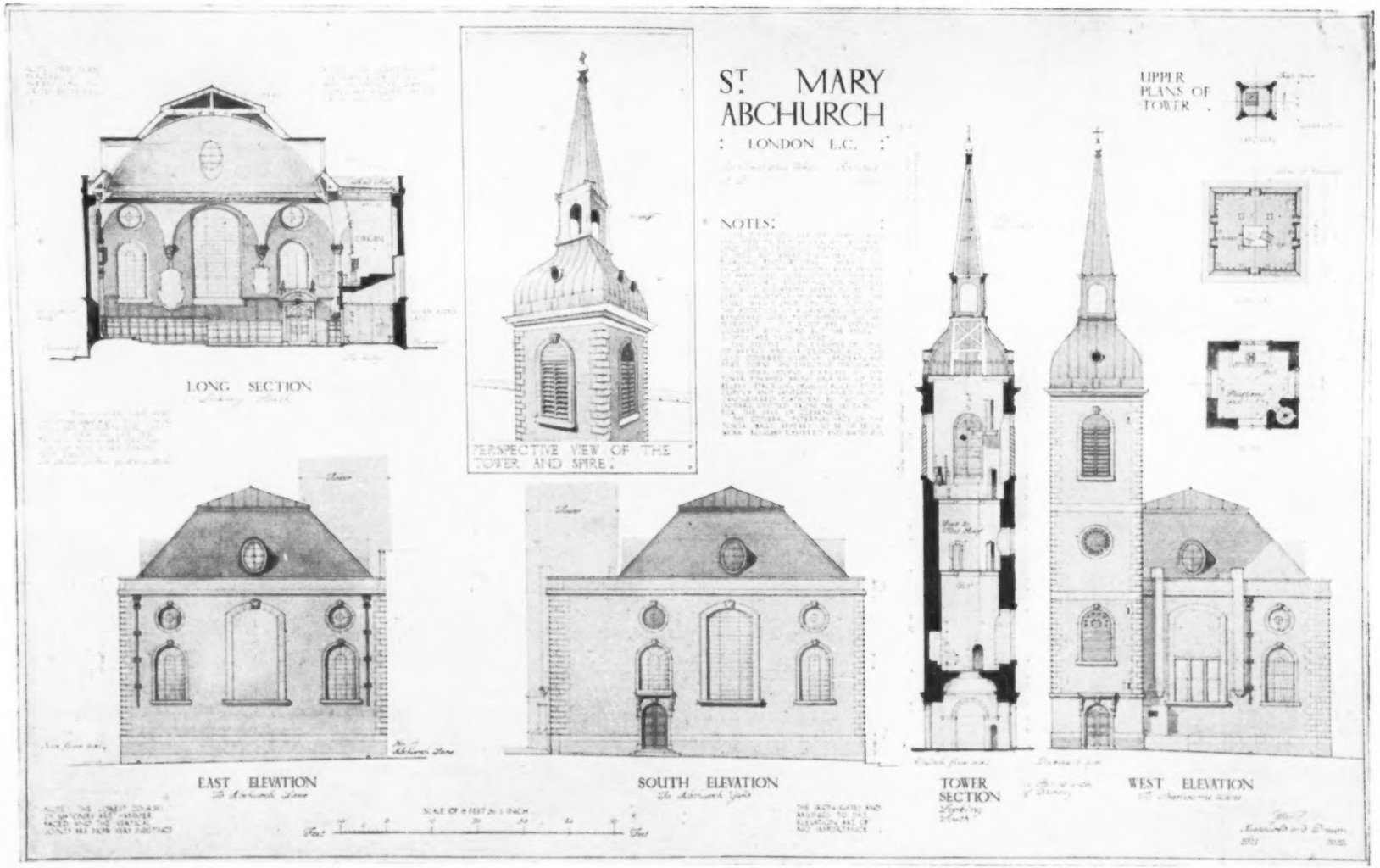
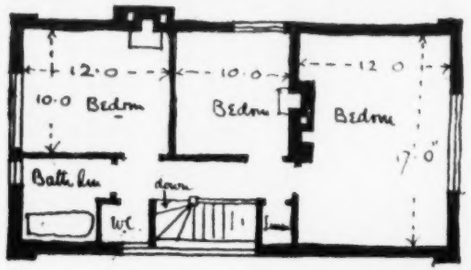
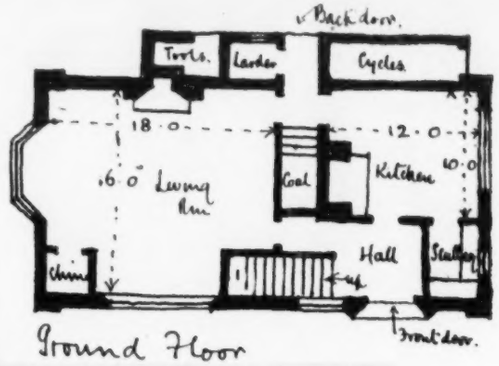


Measured and drawn by Mr. Gilbert Gl. Tyte, A.F I.B.A.





BLACKTHORN COTTAGE, CHIPSTEAD.—Mr. G. Blair Imrie, Architect.

THE INDIAN HOUSE.—I.
TOWN HOUSE.

THIS short series of articles is intended to give some idea of the kind of house the Indian builds for himself—a house that, though not unaffected by European influences in matters of detail, has developed its main features independently of these.

The original conception of the Indian house plan dates back to prehistoric times, and is obviously akin to the type that reached Greece through Asia Minor as early as the sixth century B.C.

Of the primary development of this plan we have yet to discover the date and place. Indeed, it may be doubted whether it will ever be possible to establish these, and we may have to rest content with the epithet "prehistoric." At the same time, our knowledge rather points to Mesopotamia as the place of origin—the probabilities being clearly in favour of an original basic type rather than of independent development, owing to similarity in climatic conditions.

This plan, starting from a central courtyard around which the rooms are placed, was obviously carried a long way before any idea of a second story entered the minds of the constructors. We see this in the Greek and Græco-Roman developments, where the staircase was not a prominent feature in house design; while in India, to this day, though the houses are often three or four stories in height, the staircase is rarely considered architecturally, but is merely wedged in as an unavoidable necessity. Furthermore, in the south of India, fair-sized houses are still built on one floor only and retain almost exactly what must have been the general characteristics of the original type.

Though, unquestionably, the courtyard house was general in the Indian peninsula, it is by no means universal. There are extensive districts where it seems never to have found a footing; these, roughly speaking, coincide with the hilly country, or with that where—for other reasons—the rainfall is exceptionally heavy. Again, in crowded cities, the courtyards have been to a large extent built over, and this has weakened the tradition as to their being an essential feature. There is yet a third case where European influence has been strong enough to induce the substitution of the small bungalow or villa for the traditional type. The last two cases are, naturally, of less interest to us; but the first-named will be illustrated by examples from Cochin, on the south-west coast.

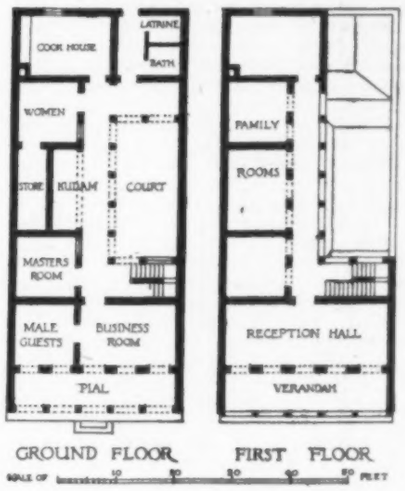
In tracing the development of the Indian house, it should be borne in mind that records and investigations seem to show that in early times the Indian city was much more extensive in proportion to its population than those now standing; and that what defences it possessed were slighter and more extended than in more recent times. As in Europe in the Middle Ages, the city wall conduced to higher and closer building, and the original spreading house of one story with spacious court and garden became compacted into a high block with a contracted courtyard. This change, as might be expected, is more marked in northern and central India—the battle ground for centuries of the numerous races both native and immigrant.

These brief notes on the influences that have affected the Indian house might be followed by a more detailed study of the requirements of the various castes and occupations, which dictate certain details of arrangement. There is, for example, the need for convenient planning in regard to ceremonial observances—of course, more exacting, the higher the caste. Among these we find provision for bathing before and after meals, and in some cases the preparation of the meal itself must be conducted only by those of the caste partaking. There are numerous subtleties of this kind, which, though they seem natural enough in India, are hardly of sufficiently general interest to demand detailed consideration here.

One social factor there is which exercises so important an influence on planning, that it can nowise be passed over—namely, the position of women. The high caste Hindu, in common with the Mohammedan, requires the seclusion of the women of the family behind the purdah; and thus in all houses, except the smallest, there will be a part to which male friends can be admitted without direct access to the remainder. In the large house, this part is often practically the whole ground floor—the women being relegated to the upper floors. In the smaller house it will be one or two rooms off the front verandah. Though the typical plan adapts itself to such arrangements, they do not seem to have influenced it originally to a greater extent than the subordination of women affected the Greek house; and it is doubtful if in early times the Hindu women were less free than those of Greece. Undoubtedly, Mohammedan ideas have modified Indian customs to some extent; but the question of womar's position in the East is much too wide a one to embark on here, especially as, even at the present time, there are in India so many shades of variation in custom, and in some parts, indeed, radical differences in the entire social structure.

The feature most specifically characteristic of the Indian house is the front verandah, which is almost invariably carried along the whole or greater part of the façade on every floor. On the ground floor it is a resting and meeting place for the men of the house and their friends; on the upper floor, it is usually partially screened, in order that the women may have an outlook into the street. The Indian is sociable by temperament, and the casual intercourse that the *pial* gives suits his needs.

A SMALL TOWN HOUSE

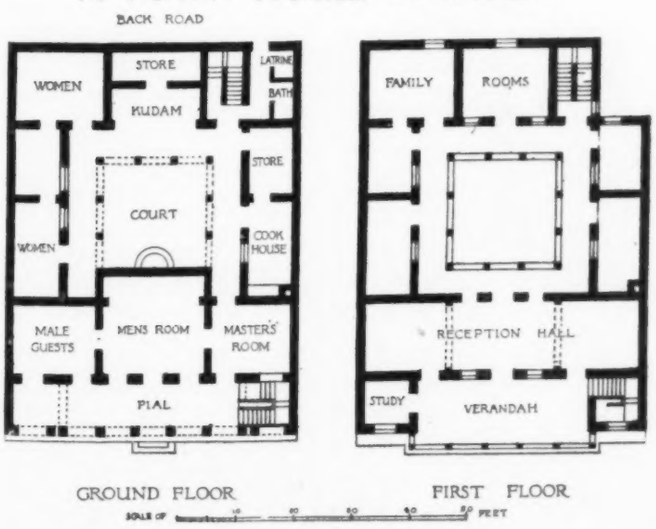


Often, too, in hot weather, the men sleep in the *pial*, while the women occupy the courtyard or the roof (when the latter is a flat one). Religious teaching holds that the *pial* should be open, in order that it may provide the hospitality of a resting place for the wayfarer.

As plans will be given of typical houses, it is hardly necessary to add to these outline notes on the arrangements, but it may be well to supplement them with a few remarks on construction. As might be anticipated, in a country the size of India, with relatively poor transport facilities, constructive methods depend on local materials. Where timber is plentiful, as in the hills, wood construction is general. There are several areas with excellent stone obtainable in lengths up to 20 ft. or more, and here both walls and floors are constructed in stone, the latter being formed of beams of stone bearing on the walls or intermediate arches. Elsewhere brick in mortar or mud forms the walls, and for small houses and huts tempered mud is in very general use. A well executed mud wall on a rubble plinth kept in good repair will last a couple of hundred years in the drier districts, and by reason both of its material and thickness is an excellent protection against extremes of temperature. It is, however, hardly suitable for buildings of more than one story. Flat roofs are formed as floors and covered with plaster or mud, the latter requiring renewal from time to time. Tiling is very general as a roof covering, the tile most in use being a small tapered hollow one placed alternately concave and convex side upwards. In recent years Mangalore tiles (a flat interlocking pattern) have come into very general use in the South of India, and these are often laid on flat under-tiles as an increased protection against the heat. Tiling generally is laid much more heavily than would be the case if the purpose of throwing off wet were the only one it served. Small houses and huts are often thatched with straw or palm leaves, but this is open to the same objections as elsewhere in regard to risk from fire and in affording harbourage for snakes, rats, and other vermin.

Structural arrangements and actual construction are both of a fairly simple character based on tradition, as must needs be the case when it is not usual to put anything on paper beforehand. The Indian is, however, an excellent craftsman and his trade knowledge embraces a very full and detailed scheme for the proportions of the various parts of a building. The finish and accuracy are not quite what a European expects, as these aspects of building do not appear to interest the Indian builder to anything like the extent to which he is interested in decorative effects or in ornamental detail. Up to quite recently these latter employed a large body of highly skilled modellers and carvers,

A TOWN HOUSE IN INDIA



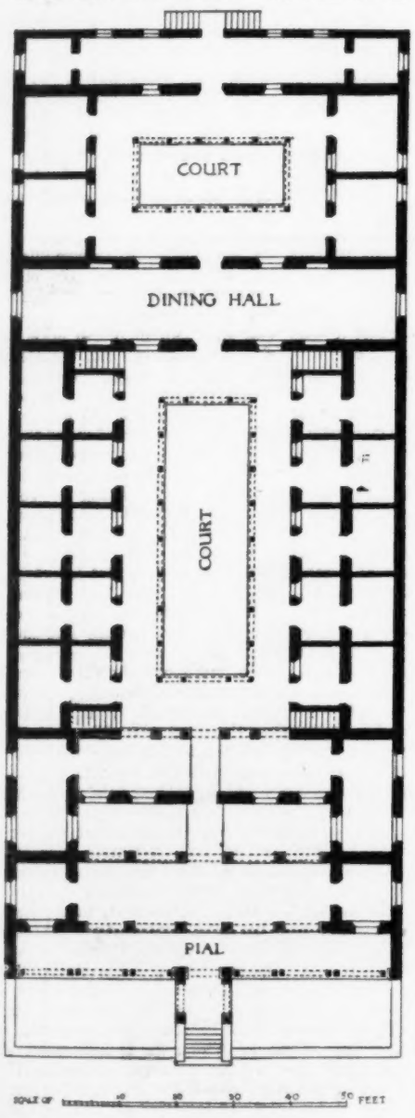
but unfortunately the demand for such work is now, owing to European influence, rapidly dying out, and in many districts these craftsmen have practically disappeared. The illustrations from Baroda show some good work of this kind, but none of this has been done within the last 30 or 40 years. The whole modern tendency, as it operates in all but the more remote districts, favours improvement in the mechanical aspects of craftsmanship and the elimination of the decorative qualities in design. Of course the schools of art and other bodies are endeavouring to counteract this, but so far their efforts have achieved but a small measure of success.

Gwalior State, under the enlightened control of the Maharajah Scindia, and to some extent one or two of the Rajput States in Central India, are exceptions to this rule, the traditional craftsmanship having been fostered, thus securing that there has been no break in the continuity of design. The example given from the city of Lashkar, which is practically the new Gwalior, some two miles from the old city, shows the general character of building in these parts, and it is interesting to know that it is possible to carry out houses on these lines even at the present time. Stone is plentiful in this district and timber scarce, so that buildings are constructed entirely of the former material. The architecture, it will be observed, has been influenced by the ideas of the Moghals, but the incorporation of these ideas, as has been pointed out by Mr. E. B. Havell, being left in the hands of the Hindu builder, the imported features, such as the arch, have been assimilated, and the work still retains a definitely Indian character.

The plans accompanying this article are given as typical plans of the Indian town house. They are of course subject to innumerable variations in detail and in the scale of accommodation, but it may be accepted that, subject to the reservations made earlier in this article, the basis of the plan is the internal courtyard.

It is perhaps as well to explain that family meals are usually taken in the Kudam, off the courtyard. On ceremonial occasions such as weddings the meal is served to the numerous guests in the largest room of the house.

HOUSE IN SOUTHERN INDIA



SEWAGE PURIFICATION AT WORCESTER.

ACTIVATED SLUDGE PROCESS.

DR. SIDNEY BARWISE, Medical Officer for Derbyshire, presided at the annual summer meeting of the Association of Sewage Works Managers at Worcester recently, and delivered his presidential address. Mr. T. Caink, City Engineer of Worcester, afterwards gave a description of the purification of the sewage of the city by the activated sludge process.

Dr. Sidney Barwise, in his presidential address, spoke on the activated sludge process of sewage purification. He said the essential difference between purifying sewage by the activated sludge process and the old method of removing suspended matter, whether by purification, subsidence or septic processes, and the subsequent oxidation and nitrification of the organic matter in suspension was this, that in the activated sludge process the organic matter in suspension was broken up and oxidised at once by various groups of living organisms in one process. Beyond supplying air to the sludge, innumerable infusoria, amœbæ and other protozoa increased at a great rate. They lived upon the organic matter and split it up, at the same time liquefying, oxidising and nitrifying bacteria developed in myriads. In this process the changes which take place when sewage was purified on a Dibdin contact bed and by subsequent treatment on a percolating filter were consummated in one process at one time. For these changes to take place it was necessary that the sludge consisting of organic matter with colonies of infusoria and bacteria should be stirred up in the presence of air and intimately mixed with the whole mass of the sewage. When they were at Sheffield last year they had an opportunity of seeing an interesting experiment where the stirring up was done mechanically and where the air was forced into the sewage by an ingenious system of turbines. In Worcester the agitation of the sewage was effected by the air itself, which was blown in for oxidising the sewage. The question which was the more economical arrangement was one which could only be settled by actual experience. If he might presume to express an opinion it was that unnecessary work was done in forcing the air through porous blocks, and it occurred to him that the process he should have expected Mr. Caink to have adopted was to have distributed the air by means of one of his revolving arms fixed at the bottom of a circular tank inverting the ordinary process of a percolating filter. As an outcome of the activated sludge process he thought before long they would see a new form of percolating cultivation bed made of something like brushwood laid on a sloping bed of concrete, which could easily be cleaned, or possibly a Dibdin slate bed. The sewage and the sludge would be aerated with compressed air and distributed over the brushwood or poured into the Dibdin bed. In either case the colonies of confervæ, infusoria and bacteria grow and automatically fall off. The effluent would contain an enormous quantity of what they called humus, and would have to pass through a settling tank. If tanked sewage applied to a Dibdin slate bed were aerated as it was applied to the bed, he was confident that in many cases no subsequent filtration would be necessary. There were many sewage works in Derbyshire which were inefficient, to which the activation of the sludge would make the difference between success and failure. The charm of the process to him was the infinite variety of the methods in which it could be applied. Indeed, the rivers might themselves be purified in the ponds above weirs on their courses. They were at Worcester to give impartial consideration and investigation to the orthodox scheme of the activated sludge process as devised by Dr. Fowler and as carried out by Messrs. Jones & Attwood in consultation with Mr. Caink. He was exceedingly glad to see a firm of engineers like Messrs. Jones & Attwood had the courage to back their opinion by putting down works for the city of Worcester on the terms they had done. It was somewhat a new departure in England for an engineer to devise a scheme and carry it out. This was the usual process in America. If they wanted a bridge across a river a bridge engineer would design and build the structure. In this country an engineer designed a work and a contractor carried it out. He believed the American system was a much better one than the English. The only way in which engineering works were carried out on these lines in England was where the official engineer of a corporate body prepared a scheme and carried it out by administration. For some reason or other the Local Government Board always made special enquiries into cases of that kind and asked many questions as to the remuneration the official in question was deriving from the scheme. This was perfectly right, and speaking from his experience in Derbyshire he could say with confidence that the scheme which had been carried out by the officials of the local authorities compared favourably with those designed by Westminster engineers. The chief objection that he had to the system of employing engineers was that they were paid by commission as a percentage on the cost of the works, and engineers were human.

Mr. Caink supplemented his paper by alluding to an incident which had since occurred. On the afternoon of Monday, June 25th, an apparently large quantity of some tarry compound arrived in the sewage at the works and passed into the purification tank. This discharge continued until midnight. The effect upon the purification seemed almost disastrous. In two or three hours the effluent from being a transparent, colourless and odourless liquid became opalescent and possessed a strong tarry odour. The incident was emphatically disconcerting. With the hope of correcting the mischief the tank was partially emptied and river water allowed to run into it, while the air was kept continously supplied. He had to leave two days afterwards for the south of England and did not see the works again until the following Tuesday. Mr. Lamb informed him that the contents of the tank went through certain phases. Towards the end of the week the effluent, while getting fairly transparent, assumed a red colour, gradually changing to orange and yellow by the following Tuesday when he visited the works. The tarry odour was then almost imperceptible. The colour had now become paler and the effluent more transparent, and apart from the tint, appeared to be fairly satisfactory. A bottle of the effluent and also of the screened sewage, were despatched to the analyst, taken when they were at their worst, after the influx of the tar. The analysis showed an extraordinary rise of the oxygen absorbed figure in the screened sewage as well as in the effluent. The former was usually between 3 and 4 parts per 100,000, while the oxygen absorbed averaged about 0.8. These figures rose to 14 in the screened sewage, and to 8.4 per 100,000 in the effluent. But the dissolved atmospheric oxygen absorbed in five days showed only 2.2 parts per 100,000 in the effluent, and no putrefaction was observed in five days; it contained only 2.8 parts per 100,000 of suspended matter. The effluent would therefore under those conditions have complied with the conditions laid down in the agreement between Messrs. Jones & Attwood and the Corporation.

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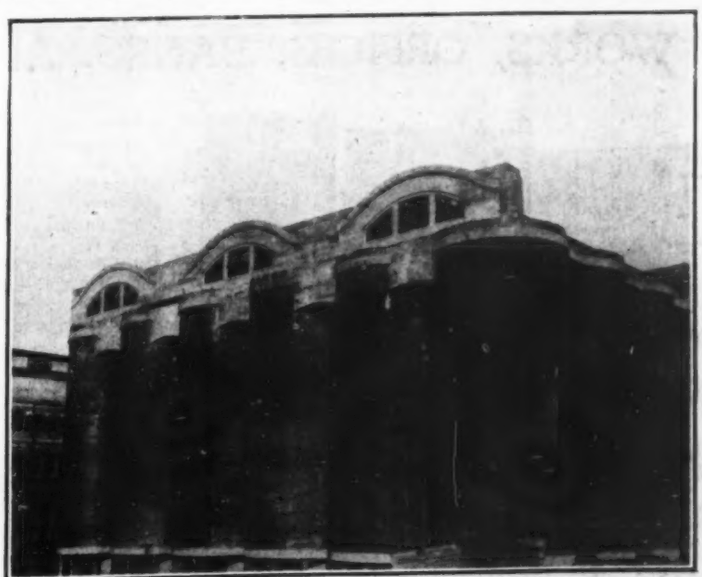

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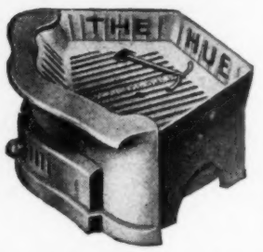

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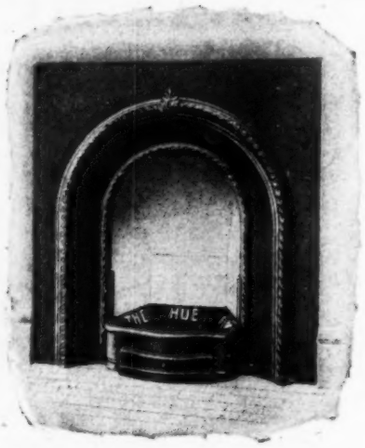

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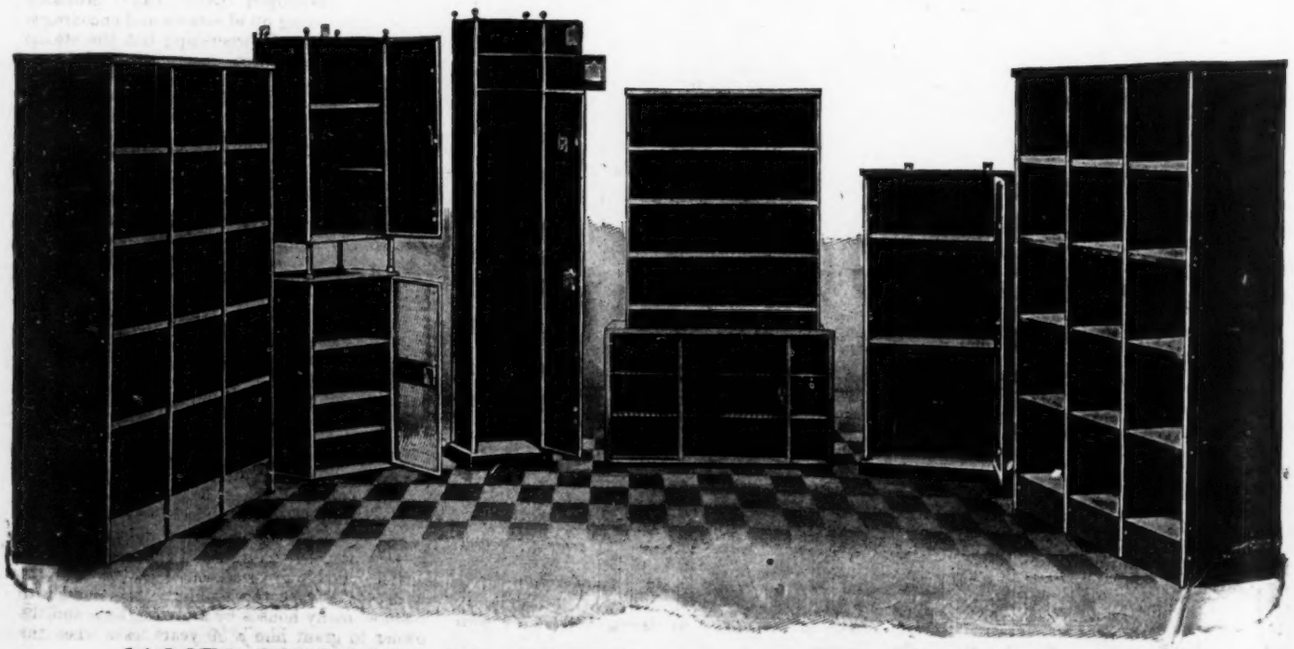

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THE BUILDING TRADE.

SPECULATIVE BUILDINGA ND THE HOUSING PROBLEM.

IN ENGLAND AND THE UNITED STATES—A COMPARISON.

BY D. B. BUDD.

AT the termination of the war the problem of how to provide houses for the people will be a very difficult one to solve. The interest on borrowed money will be very heavy; people buying houses for investment will not be satisfied with as low a rate of interest upon their money invested as they were a few years ago; mortgages will be more difficult to arrange, and the general prospects will not be likely to tempt the speculative builder into starting any large building venture.

No doubt local authorities will engage in the business of providing some of the needed houses, but the bulk of them will have to be built by private enterprise mostly by the speculative builder.

It is generally admitted that it is desirable, from every point of view, that as many people as possible should possess their own houses, and with this in mind I venture to give my experiences as a speculative builder in England and the United States of America, and show how the method of conveying property, recording deeds, &c., in the State of Michigan, and the Mechanics Lien Law of that State, help people to build or buy houses for themselves, help in the development of estates, and incidentally help solve the housing problem.

Some of the American States have adopted the Torrens system of registration of title to property, first introduced by Robert Torrens in Australia for the registration of real estate. In this we get a registered title, a Government declaration of the ownership and condition of title, and a title which cannot be disputed.

The State of Michigan has not yet adopted the Torrens system, and the method of buying and selling land is best illustrated by taking a hypothetical case.

Suppose "P" (the purchaser) is buying a plot of land from "S" (the seller) for £100. "S" does not necessarily go to his solicitor—although some sellers do—he may decide not to employ one. He will take his abstract of title to an abstracting company, who will examine the records kept at the County Hall, make a copy of mortgage, tax or encumbrance recorded against the title, attach the copy to the abstract and certify that this is the only thing against the property to date. For this the charge would be as a rule from 12s. to £1.

The abstracting company will give "S" without charge a blank form of warranty deed, which he will fill in as the one which was given to him when he purchased the land, except that he will substitute "P's" name for his, and leave the date blank. "P" then takes the abstract and draft deed to his solicitor, who examines the title. If this is found satisfactory, and the description of the property is the same on the deed as on the abstract, "P" completes the purchase and fills in the date. He then immediately takes the deed to the County Hall and has it recorded. The cost of recording the deed is about 5s., and in most cases the solicitor's charges for examining the title would be about £2.

The seller, therefore, has to pay from 12s. to £1, and the purchaser about £2 5s. The cost would be the same whatever the plot was worth, the consideration usually being stated in the deed as "one dollar and other valuable considerations."

This method is a little more cumbersome than the Torrens system, but we have the title recorded, and I will show how that can be of some real use.

Suppose "P" wishes to build. He would not have much difficulty in obtaining the material without the ready money, as anyone who supplies labour or material can, if not paid within sixty days of the completion of the work, place a lien on record against the property under the Mechanics Lien Law and he then has a charge against the property.

In our hypothetical case, we will suppose the house is now built, and cost £300, and "P" wishes to dispose of it. He first applies to his bankers (who are allowed by law to advance up to 50 per cent. of the appraised value of the property), for £200 on mortgage at 6 per cent. When the bankers' solicitors have examined the title, the money is advanced and the mortgage recorded. This costs about £2, and includes survey and stamp. We will suppose in this case that "P" has found a buyer ("B") who will buy the house for £500, but can only pay £75 down and the balance as rent. This can easily be arranged by means of an instrument known as "the land contract." Blank forms for this purpose are given by the abstracting companies or bought for a few cents at the stationers.

They would be filled in to describe the property in the same way as in the warranty deed, and state that £75 has been paid and £4 a month would be paid, which sum would include 6 per cent. interest upon the unpaid balance.

When the whole amount had been paid, the owners would execute a warranty deed conveying the fee to the holders of the contract. This contract would be recorded, although it is not necessary if the holder intends to occupy the premises, as the occupation in itself is sufficient evidence to show that he has a claim on the land; and the owner of the fee could not cheat him out of his equity by conveying to someone else without disclosing the existence of the land contract.

The only costs incurred in this transaction would be the examination of the title by the holder of the land contract.

The builder has now received £200 from the bank, £75 from the purchaser, and has a balance of £225 payable to him at the rate of £4 a month, which includes interest.

He will now have no difficulty is disposing of his equity whenever he requires the cash; but he will have to "discount the contract." There is always a ready market for these. At the present time he would have to allow about £40 on his balance and receive £185. He will then have made £60 profit, the other £40 being made by the one who is financing the buyer of the house. These land contracts are very useful to anyone who deals in real estate. "P" could make terms with "B." If "B" put more than £75 down and more per month, he could accept less for the house, as it would not cost him so much to discount his contract. He might, on the other hand, if he had confidence in the man he was selling to, accept as little as £30 down, charge perhaps an extra £20 to cover the extra risk and for the longer time it would take to pay for the house, and then discount the contract at a higher rate, or keep it until it was a safe investment to offer for sale.

The owner of a house, wishing to sell and not requiring all the money, finds this a splendid way to dispose of his property, leaving the money invested at a good rate of interest. He does, in fact, finance the buyer. Plots of land are usually sold on land contract.

The result of this comparatively easy transference of title and interest in land is that many people interest themselves in acquiring land and houses. Companies are formed who buy tracts of land, sub-divide them into lots, put in sewers, sidewalks, &c., and send out salesmen who call from house to house to find buyers for the small lots of land, and sell them on land contract. Many people buy lots, pay for them by monthly instalments, and when the land is "deeded" to them, build their own houses.

Others buy in the hope of selling at a profit, knowing that transference of their equity is so simple that it is no obstacle to the sale.

One result of this building of so many single houses and of the Mechanics Lien Law is the existence of a class of sub-contractor who will contract to provide all labour and materials and everything necessary to carry out part of the work of building the house. The excavator will contract to dig the basement for so much; the bricklayer will contract to do all the brickwork and will find all materials, scaffolding, &c., and take away any surplus material to his next job; the same thing applies to the carpenter, plasterer, plumber, painter, &c.

A man with a very small capital is enabled to start this sub-contracting, as he can obtain material on credit by reason of the Mechanics Lien Law, and is protected also himself by this same law. This, again, makes it easy for one to build one's own house.

To anyone accustomed to handling property in England, the difference is quite obvious.

There is land registration in the county of Middlesex in England, and although I have bought and sold property in this county I have not found any benefit from the registration over the county of Surrey, where there is no registration. The difference, however, has been that whereas I have sold a house in Middlesex the purchaser has had to pay his solicitor usually one guinea for registration and 7s. 6d. for stamps, and in the case of the property being mortgaged, another guinea plus 7s. 6d. stamps, total £2 17s.

Referring to stamp duties, I suppose one must not venture to hope to have the stamp duties on conveyances and other deeds reduced, as they provide a large sum to the Chancellor of the Exchequer with very little cost of collection, and he wants all the money he can get at this period; but they are a great hindrance to the free exchange of property, and although their abolition would not solve the housing problem, it would materially help to do so. The amount collected would be quite small compared to the amount the different local authorities would spend if they had to take in hand any extensive housing schemes.

My experience has been that the "Increment Value Duty" does not have much effect, as the 10 per cent. increment allowed on the assessable site value is as much as most people expect their property to appreciate in value.

The "Undeveloped Land Tax" probably helps the breaking up of estates and encourages the transference of ownership; but the stamp duties on conveyances, mortgages and leases are a dead load, holding up the business of building more than is generally appreciated.

In the case of many houses I have sold in England, the purchase price of which is about £600 each, the purchasers have borrowed money on mortgage, and the law costs, including stamps, have often come to over £20. This fee, of course, must be paid each time the property changes ownership, and nobody except those in the business know how much this is discouraging people from buying their own house.

The fact that people in the State of Michigan can be interested enough in real estate to buy lots for investment, causes syndicates to be formed to take up vacant land that is ripe for building, sub-divide it, and sell it in lots very much as has been done in parts of Essex on the London, Tilbury and Southend Railway Co.'s line; but with this difference: that in Essex, the land has often been just farm land, not ripe for building. Most of the best building land around London has been "covered" by speculative builders, who have built on building agreement with the owner of the freehold.

Some building agreements provide for the owner to finance the builder; the builder to build so many houses by a certain time and the owner to grant him a 99 years lease when the

houses have reached a certain stage. In all probability, he would pay the builder a certain sum of money for creating that ground rent. The builder's capital is usually small, and he is practically compelled to build a row of houses of one design as quickly as possible; do more work, and take more risks than he should do on his limited capital. If he cannot sell the houses, and in any way fails to perform his part of the obligation, the freeholder steps in and takes everything on the land to compensate him for the advances made. There is no law to protect the material merchant, and although they sometimes co-operate to carry out the agreement themselves, they usually do not save much out of the wreck.

I know of one estate in Surrey where builders' merchants refused to call, as so much of their material had passed from time to time into the hands of the freeholders without their having received any payment for it. This condition of affairs naturally makes the material agents careful and they are not to be blamed for giving only short credit and not waiting until the house is finished to be paid.

Any builders' merchant will admit also that he could supply cheaper if he could escape from the bad debts.

It is these differences that make the condition of the building trade in the United States impossible to England. If a man in England wishes to build a moderate-sized or small house for himself, embodying his own ideas or carrying out a few pet notions of what he considers would be great improvements on existing ideas, he is up against a tough proposition.

In the first place, he would be lucky if he could find a plot in a location that will suit him. The ground is not sold that way, as is the case in the U.S.A. Then, many conferences would have to be held with the architect. The prospective owner of the small house has not the numerous books of plans that can be easily obtained in the U.S.A. for the American and his wife to look through in the evening, so that they may formulate their own ideas.

Again, the number of contractors who would build a single residence at a reasonable price is very limited—the specialists in house construction are busy building in a row. It does not pay to build a single house in England. He has not the choice of numbers of small builders with small capital who help in the work themselves, and specialise in building single houses, a class of contractor who would be as common in England, or more so, if the same conditions prevailed; and finally, when he is finished, his usual cry is "Never again! Fools build houses for wise men to live in!"

The American, on the other hand, says to himself: "I can see where I could make some improvements—I shall sell this house and soon build another,"—and with every house he builds he helps to solve the housing problem.

How is it that we do not find the same conditions obtaining in England as in the United States of America, Canada and Australia?

We have land registration in some counties. We have a register with all kinds of information of the properties in all England at the offices where Increment Value Duty is assessed, and we have the "Town Planning and Housing Act" to help in the proper planning of vacant land.

In the first place, the people are not given the opportunity of buying a piece of land in a nice location for a home as they are in America. Every time the land changes hands in England, the new owner is presented with a formidable looking document with seals and tape affixed thereto, and an even more formidable bill of costs from his solicitor. The American gets a form of deed on a single sheet of paper, sees that the description of the property is correct, and gets registered as the owner for a few dollars. He knows all about the transaction, and is not afraid to do it again when he wants another piece of property.

Thousands of American workmen—especially those in the building trade—buy lots and build homes for themselves, and although they are helped by reason of wooden construction being more adaptable to the climate in the U.S.A. than in England, the Englishman would do the same thing—to a great extent—given the same opportunity. The class of sub-contractor who would take all the responsibility for one particular part of the building would come into existence. Builders' merchants would adapt themselves to the new conditions and be ready to supply materials for single houses; and we should have hundreds, where we now have single instances, of people striving to build the ideal artistic house for a home. And although we should still have rows of houses and flats being built of one design, as is also the case in New York, Chicago, and other large American cities, where these conditions exist, yet we should also have many small speculative builders buying a plot or two, building one or two houses; and when they had sold these, repeating the operation and helping by so doing the great problem of housing the people.

It is not a question whether these things *can* be done or not; they are being done in the U.S.A. and other countries, and can be done in England when the war is over, if some such system as the Torrens is adopted, the people educated to know how easy it is to buy property under such a system, and the stamp duties abolished.

The English builders are not at fault. They build more substantially in England than in the States, and the cost of upkeep of property is consequently less.

In England we have splendid building societies which have enabled so many people to become their own landlords, and the Americans recognise this and pay us the compliment of copying us and establishing similar societies in their cities.

The land around American cities, I know, is no cheaper than it is around London, and there are as many willing sellers around London as there are anywhere; but the out-of-date system of handling an estate is responsible for the people not being able to get the land.

I am no lawyer, and know a great deal more of building construction than of law; but I do know that the system which enables a solicitor to hold an old conveyance or other deed, and charge one or two guineas for its production and inspection every time the property it refers to changes hands, is all wrong, and will not do if we want the people to solve the housing problem for themselves.

When the boys come home, we know there will be a number who will be looking for a piece of land upon which they may build themselves a home. They will have learnt that quite a few things in a home they thought were necessary can be done without; and with a new system of land registration, and a few alterations in some of the Rural and Urban District Councils' bye-laws, there is no reason why they should not have what they want.

NEW COMPANIES.

The particulars quoted below have been compiled by Jordan & Sons, Ltd., Company Registration Agents, of 116 and 117, Chancery-lane, W.C. 2, from the documents available at the Companies Registry:—

FERRO-CONCRETE SHIP CONSTRUCTION CO. LTD. (147,733), 4, St. Mary Axe, E.C. Registered June 14. To design, construct, build, equip, and repair steamships, vessels and craft of all kinds, docks, pontoons, floating docks, piers, jetties, wharves, workshops, warehouses, stores and buildings, &c. Nominal capital, £30,000, in £1 ordinary shares.

H. WINDSOR & CO., LTD. (147,650). Registered June 5. To acquire and take over business of builders, contractors, boiler fitters and furnace builders, &c. Nominal capital, £10,000 in £1 shares.

JOHN BARNSLEY & SONS, LTD. (147,643), 82, Cradley-road, Netherton, nr. Dudley, Worcester. Registered June 4. To carry on business of manufacturers, factors, merchants and agents for the production and sale of hydraulic, pneumatic, electrical, steam, gas, oil and general engineers, &c. Nominal capital, £20,000 in 9,000 £6 Cumulative Preference Shares and 11,000 £1 Ordinary Shares.

PROPOSED NEW BUILDINGS AND OTHER WORKS.*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works, at the time of publication, have been actually commenced. Abbreviations:—T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; L.G.B. for Local Government Board; B.G. for Board of Guardians; L.C.C. for London County Council; B.C. for Borough Council; and P.C. for Parish Council.

AVONMOUTH.—At a meeting of the Health Committee a letter was read containing details of an amended housing scheme at Avonmouth. This provides for the erection of 150 houses, which the National Spelting Co. are to have the right of taking over, two years after the declaration of peace, with a view to their passing them on to the Public Utility Co. If that is not done, then three years after the declaration of peace the Corporation are to have the option of purchase upon the same terms as they had previously agreed to take over the 500 houses embraced in the original scheme. The Corporation are to adhere to their riginal terms.

AYLESBURY.—Plans passed:—Drainage extension at Oxford-road Mill, for Mr. Collier.

BRISTOL.—After the war a large amount of building will have to take place in Bristol to make up for the arrears in providing housing accommodation and in addition there are important industrial developments which will have a bearing on the operations of the future. A civic sub-committee has been considering this question, particularly with regard to the north and north-west parts of Bristol, and the Council will be asked to sanction the preparation of a town planning scheme for these areas.

BUCKIE.—The Surveyor has passed plans for shed at rear of Fern Cottage, for Mr. James Keir: new door in existing stable at Craigard, for Mr. John Barclay, who is turning the stable into a garage.

DERRY.—Derry Corporation has decided to request the Irish Society to construct a promenade along the river front from Troy Hill, near the shipyard, to Culmore, where the river empties into the lough.

DODWORTH.—The Dodworth U.D.C. has resolved to prepare a housing scheme and to ask for borrowing powers.

HANWELL.—It is proposed to erect a parish hall, with a Calvary outside, for St. Mellitus' Church, Hanwell, as a War memorial.

HESTON AND ISLEWORTH.—Plan passed: Addition, Marquise Villa, St. Peter's-road, for Mr. J. Neighbour.

LONDON.—The Licensing Justices have sanctioned plans as to certain alterations proposed to be carried out in the Wilton, Coventry-street, and Great Windmill-street; and the Falcon, Wardour-street.

OSSETT.—Plans passed by the T.C.:—Shed at Sunnydale Mills, for Messrs. Smith Bros., & Hepworth, Ltd.; alteration of washhouse into loose box, for Mrs. Sam Jessop; extension to works at Flushdyke, for Messrs. John Greenhalgh, Ltd.; wood shop at the Green for Messrs. F. Smith & Son.

STOKE NEWINGTON.—Plan passed by B.C.: Reconstruction of drainage, 13 and 15, Grayling-road, for Mr. J. Crane.

WAISALL.—Plans passed by T.C.:—Chimney-stack, Plack-road, for Messrs. J. Russell & Co., Ltd.; cattle shed, West Bromwich-road, for Mr. E. Allsopp; scullery, 4, Lichfield-road, for Mr. S. Jagger; offices, Birchills-street, for the Walsall and District Iron Co., Ltd.

WANDSWORTH.—The Justices have sanctioned certain alterations intended to be carried out in the off-licensed premises, 84, Brookwood-road, Wandsworth (licensee, Harry Hollingshead).

Wykehamists' War Memorial.

It is proposed to erect a memorial at Winchester to Wykehamists who have fallen in the war. The scheme provides for a double cloister running from east to west, "returning" at both ends, with a grass cloister garth in the centre. The total length would be between 50 and 60 yards. There would be room for separate monuments. A large gateway would be flanked right and left with two halls, one a war museum and one a room for Wiccamica. The cost of the cloister is estimated to be from £15,000 to £18,000 and the gate and two halls about £8,500.

Dug outs in the City.

We hear that van loads of bags of sand, timber and metal lathing are being carried into the head offices of banks and shipping offices, &c., &c., for the purpose of forming bomb-resisting dug-outs in these premises. Mr. Charles R. Price, of 87, Bishopsgate, is engaged in carrying out the work.

* See also our list of Competitions, Contracts, &c., on p. 54.

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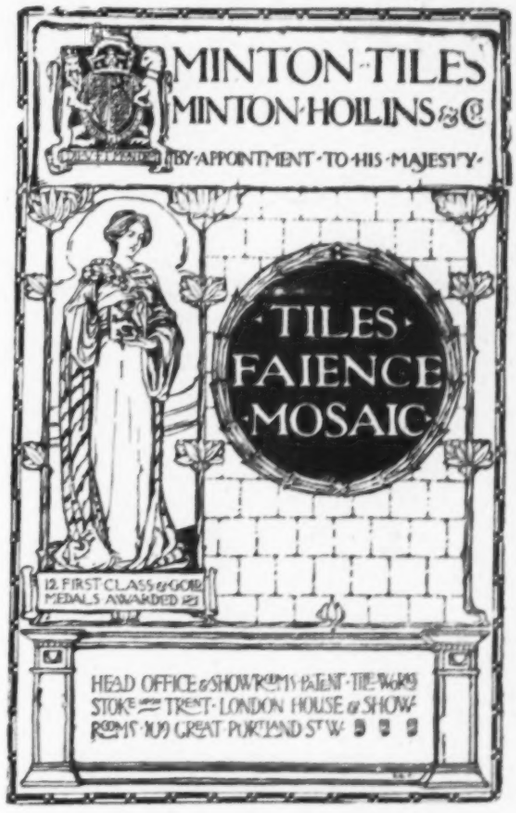
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Competitions, Contracts, &c.

For some contracts still open, but not included in this List, see previous issues. **Those with an asterisk (*) are advertised in this number.** Contracts, iv; Tenders, —; Public Appointments, xvi; Auction Sales, xvi. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

*** It must be understood that the following paragraphs are printed as news, and not as advertisements; and that while every endeavour is made to ensure accuracy, we cannot be responsible for errors that *may* occur.

BUILDING AND PAINTING.

JULY 27.—**Pontypridd.**—SCHOOL WORK.—Altering and extending Lan Wood School, Pontypridd, for a Red Cross Hospital. Plans, &c., may be seen at office of Arthur Ll. Thomas and Gomer S. Morgan, Architects and Surveyors, 23, Gelliwastad-road, Pontypridd.

JULY 30.—**Ogmore Vale.**—ALTERATIONS, &C.—Alterations and repairs, and for painting, colouring, &c., to the Workman's-hall and Institute, Ogmore Vale. Specifications to be seen at the Institute and at the offices of the Architect, P. J. Thomas, Bridgend.

AUGUST 7.—**Lisburn.**—GOODS OFFICE.—The Directors of the Great Northern Railway Company (Ireland) invite tenders for the building of a new goods office at Lisburn Station. Drawing, &c., at the Engineer's Offices at Dublin and Belfast. Bill of quantities, &c., from Mr. T. Morrison, Secretary, Secretary's Office, Amiens-street Terminus, Dublin. Deposit 1 guinea.

NO DATE.—**Mallow (Ireland).**—EXTENSIONS.—Extension of creamery by Ballyclough, Mallow. Plans and specification can be seen at the Creamery.

* NO DATE.—**Stamford.**—Tenders are invited for the erection of a canteen at the Rutland Engineering Works, Stamford. Specifications, &c., can be seen at the offices of above-named works by appointment.

ROAD, SANITARY, AND WATER WORKS.

AUGUST 7.—**Dublin.**—ACCOMMODATION ROAD.—The Directors of the Great Northern Railway Co. (Ireland) invite tenders for the construction of an accommodation road about a quarter of a mile long at Dromantine, situated about midway between Goraghwood and Poyntzpass Stations. Drawing, &c., at the Engineer's Offices at Dublin and Belfast. Specification, &c., from Mr. T. Morrison, Secretary, Secretary's Office, Amiens-street Station, Dublin. Deposit, 1 guinea.

PATENTS.

APPLICATIONS PUBLISHED.*

100,595.—Aktieselskabet Phonix: Fire-proof door.

100,886.—Zennosuke Morikami: Method of manufacturing a compound for making cement, mortar, or concrete watertight.

8,144 of 1914.—Henry Imri (Deutsche Asphalt-Aktien, Gesellschaft der Limmer und Vorwohler Grubenfelder): Drainage plant for road beds containing tramway tracks.

101,218.—Simon Jules Frank: Pivoted sliding windows.

102,955.—Augustin Adrian: Removable huts.

106,641.—Ernald Barnardiston: Iron or steel plates or shapes and structures composed thereof.

106,649.—Theodore Pesinger Payne.—Movable structure or platform adapted to carry implements and devices for cultivating the soil.

106,683.—Albert Bertram Coleman: Domestic hot-water supply apparatus and fittings used in connection therewith.

106,691.—Abraham Taylor.—Extensible poles.

106,694.—James William Sutcliffe and Tom Sanderson: Tanks and cisterns.

106,709.—Charles Wright: Ventilators.

106,719.—Ferdnand Fabre: Pile driving apparatus.

106,727.—Alexander Charles Adnams: Water heating apparatus.

106,732.—Cranes (Birminghan.), Ltd., William McBride and Joseph Ford: Pivoting devices for mirrors.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

RATES OF WAGES IN THE BUILDING TRADE.

THE following are the present rates of wages in the Building Trade in the principal towns of England and Wales. It must be understood that, while every endeavour is made to ensure accuracy, we cannot be responsible for errors that *may* occur:—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Masons' Labourers.	Bricklayers' Labourers.	Plasterers' Labourers.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Aberdare	11	11	11	11	11	10½	9½	8	8	8
Accrington	11	10½	10	9½	9	10	9½	7	7	7
Altrincham	9½	1/1	1/-	10	8½	11½	11½	7	8	7½
Ashton-under-Lyne	1/-	1/1	1/0½	1/-	1/-	1/-	11	8	8	9
Barnsley	10½	11½	10½	10½	9	10½	9½	8½	8½	8½
Barrow-in-Furness	11½	11½	11½	1/-	11½	11½	11	8	8½	8½
Barry	1/-	1/-	1/-	1/-	—	1/-	11	9	9	9
Bath	9	9	9	8½	8½	9	8	6½	6½	6½
Bedford	8	8	9	8½	8	9	6½	5½	5½	6
Birkenhead	1/-	1/-	1/1	1/1	1/-	1/-	11	9	9	9
Birmingham	11⅛	11⅛	11⅛	11⅛	11⅛	11⅛	10½	8⅛	8⅛	8⅛
Bishop Auckland	9	9	10	9½	11	9	8	6½	6½	7½
Blackburn	10½	11½	11½	11	10½	11	10½	7½	8	8
Blackpool	11	11	11	9½	8½	9½	9½	6	6	6
Bolton	11½	1/-	1/-	11½	11½	1/-	11½	7½	7½	7½
Bournemouth	8½	10	10	10	8½	10	9½	7½	7½	7½
Bradford	1/-	1/-	11½	11†	10†	10†	10½†	9½	9½	9½
Bridgwater	6½	6½	6½	6½	6½	6½	6	4	4	4
Brighton	9½	9½	9½	9½	—	9½	8	7	7	7
Bristol	11	11	11	11	—	11	10	8	8	8
Burnley	11	10½	10½	10½	9	10½	10½	8	7½	7½
Burton-on-Trent	9½	10½	10½	10	9	10½	9½	7½	7½	7½
Bury	1/-	1/-	11½	11	11	11½	10½	8	8½	8½
Cambridge	9½	9	9	9½	9½	9½	7½	6	6	6
Cardiff	1/-	1/-	1/-	1/-	1/-	1/-	11	9	9	9
Chatham	9½	10	10	9‡	9‡	10	8½	7	7	7
Chelmsford	8	7½	8½	9	—	7½	6½	5	5	6½
Cheltenham	9½	9½	9½	9½	—	9½	9½	6½*	6½*	6½
Chester	10½	11	11	11	11	11	10	6½	7½	7½
Chesterfield	9	10½	10	8	9	8½	8½	5½	5½	5½
Colchester	8	8½	8½	9	8	9	6	5½	5½	5½
Coventry	1/-	1/-	1/-	1/-	1/-	1/-	11	9½	9½	10
Crewe	9	9½	9	10½	10	9½	10	7	7	7½
Darlington	11½	11½	11½	11½	10	9½	9	8½	8½	8½
Derby	11	11	11	11	11	10½	9½	8	8	8½
Doncaster	9½	10½	10½	9½	9½	9	8	6½	6½	7½
Dudley	9½	11	11	10	10	9½	8½	8	8	8½
Durham	9½	9½	9½	9½	10	9	8½	6½	6½	7
East Glam. and Mon. Valleys	10	10	10	10	—	—	9	7	7	7
Exeter	9½	9½	9½	9½	9½	9	8½	8	8	8
Folkestone	8½	9	9	9½	8½	9	8	7	7	7½
Gloucester	8	9½	9½	8½	8½	9½	8½	7	7	7
Grantham	8	8	7½	7½–8	7½–8	8½	6½	5	5	5
Grays	—	11	11	—	—	11	9½	9	9	9
Grimsby	9	10	10½	9½	10	10	9	8	8	8
Great Yarmouth	8	8	8	—	8	8	6½	5	5	8
Halifax	11½	11½	11½	9	9	11	10	8	8	8
Harrogate	10½	9½	10	9	8	10	9½	7½	7½	7½
Hartlepools	11½	1/-	1/-	1/-	11	10½	9	8½	8½	9
Hastings	8½	8	8	8½	8	8	7	6½	5½	6½
Hereford	10	10	10	10	10	10	9	7½	7½	7½
Huddersfield	1/-	11	11½	9½	11	9	8½	9	9	9
Hull	11½	11½	11½	11½	11½	1/-	9	9½	9½	9½
Ipswich	9½	9½	9½	10	9½	10	8	7	7	7
Lancaster	10½	10½	10	10	9½	10	9	6	6½	7
Leamington Spa	9	9½	9½	8½	9	9½	8½	6½	6½	6½
Leeds	1/0½	1/0½	1/-	11½	11½	1/-	10	9½	9½	9½
Leicester	11½	11½	11½	11½	11	10½	9	9	9	9½
Lincoln	9	9½	9½	9	8½	8½	8	6	5½	6½
Liverpool	1/1	1/1	1/1	1/0½	1/0½	1/-	11½	9	9	9
Llanelly	9½	9½	9½	8½	9	8½	8	5½	5½	5½
London	1/1½	1/1½	1/1½	1/1½	—	1/2	11	10	10	10
Loughborough	9	9½	9½	9	9	9	8½	7½	7½	8½
Luton	9½	10½	10½	8½	9	8½	9½	8½	8½	8½
Maidstone	10	10	10	10	10	10	9	7	7	8
Manchester	1/1	1/1	1/1	1/0½	11	1/1	11½	9	9	9
Mansfield	8½	11	10½	8½	—	10½	9	8	8	8½
Merthyr Tydfil	11	11	11	11	11	11	10	8½	8½	8½
Middlesbrough	11½	1/-	1/-	1/-	11	10½	9	8½	8½	9
Newcastle-on-Tyne	1/0½	1/0½	1/0½	1/0½	11	10½	11	9½	9½	9½
Newport, Mon.	11½	11½	11½	11½	11½	1/0½	10½	8½	8½	8½
Northampton	11	11	11	11	11	11	10	8½	8½	8½
Norwich	8½	8½	8½	8½	8	8½	7½	6	6	6
Nottingham	1/-	1/-	1/-	11½	11½	1/1	11½	9½	9½	10
Oldham	1/-	1/-	1/0½	11½	11	11½‖	11½	8½	8½	9
Oxford	9½	9	9	9	9	9	8	6½	6½	6½
Plymouth	10*	10*	10*	10*	10*	10*	8½*	7*	7*	7
Pontypridd	11	11	11	11	11	11	9½	8	8	8
Portsmouth	10½	10½	10½	10½	10½	9½	8½	8	8	8
Preston	10½	1/-	11	10½	10½	11	10½	7½	8	8
Reading	9	9½	9½	10½	—	9½	8½	6½*	6½*	6½*
Rochdale	11½	11½	11½	10	10½	1/0½	11	8	8½	9
Rochester	8	10	10	9	9	10	8½	7	7	7
Rugby	11	11	11	11½	1/-	11	10	8	8	7½
St. Albans	10	10	10	10	10	10	9	7½	7½	7½
St. Helen's	1/-	1/-	1/-	1/-	1/-	11	10½	7	7½	8
Scarborough	9	9½	9	8½	8	9	8	7	7	9
Sheffield	10½	11½	1/-	9½	10½	1/-	10	9	9	9½
Shrewsbury	8½	9½	9½	9½	—	8½	7	6½	6½	7½
Southampton	11½	11½	11½	11½	11½	11½	10½	8½	8½	8½
Southend-on-Sea	9	9	9	9	P'cework	9	7	6	6	6
Southport	11½	11	11½	11	11	11	11	7	7½	7½
South Shields	1/0½	1/0½	1/0½	1/0½	11	10½*	11	9½	9½	9
Stockport	1/1	1/0½	1½0½	11½	10½	1/-	9½	8	8	9
Stockton-on-Tees	11½	1/-	1/-	1/-	11	10½	9	8½	8½	7½
Stoke-on-Trent	10	10½	10	10	—	10½	10½	7	7	7
Stroud	9	9	9	9	9	9	8½	7	7	9
Sunderland	1/-	1/-	1/-	11½	11	9½	11	9	9	9
Swansea	1/-	1/-	1/-	1/-	1/-	1/-	11½	9	9	9½
Taunton	8	8	8	8	—	8	7	5½	5½	5½
Torquay	8	8	8	8	8	8	8	6	6	9
Wakefield	10	11	10½	9½	8½	10½	10	9	9	8½
Walsall	11½	11	11	11	11	11	9½	8½	8½	7½
Warrington	8½	11½	11	11½	8½	11	10	7	7½	8
West Bromwich	11	11	10½	10½	—	10	9	8	8	8
Wigan	11½	1/-	11½	11	10½	11½	10½	9	9	9
Windsor	9	9	9	10	—	9	—	6	6	6
Wolverhampton	1/-	1/-	1/-	11	11	1/-	10½	9	9	9
Worcester	9	9½	9½	9½	9½	9½	8	7½	7½	8½
York	9½	9½	9½	10½	10	10½	8½	8½	8½	8½

The Masons' rate given is for bankers; fixers usually ½d. per hour extra.

* War bonus of 2s. per week granted. † War bonus of 3s. per week granted. ‡ War bonus of 2s. 6d. per week granted. ‖ War bonus of 6s. per week granted. § 1d. per hour extra for men engaged on munition work.

PRICES CURRENT OF MATERIALS.

(Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry. Since our last issue several prices have been revised.—Ed.)

*** Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

BRICKS, &c.

Per 1,000 Alongside, in River Thames.	£ s. d.
Best Stocks	2 5 0
Picked Stocks for Facings	2 17 0

Per 1000, Delivered at Railway Depot, London.	£ s. d.		£ s. d.
Flettons	1 18 0	Best Blue Pressed Staffordshire	5 15 0
Best Fareham Red	4 0 0	Do. Bullnose	6 0 0
Best Red Pressed Ruabon Facing	6 0 0	Best Stourbridge Fire bricks	9 5 0
GLAZED BRICKS—			
Best White, ivory, and Salt Glazed Stretchers	14 17 6	D'ble Str'tch'rs	20 7 6
		D'ble Headers	17 7 6
		One Side and two Ends	21 7 6
Headers	14 7 6	Two Sides and one End	22 17 6
Quoins, Bullnose and 4½in. Flats	18 7 6	Splays and Squints	19 17 6

Glazed bricks priced at so much each, 25 per cent. advance on list.

Second Quality, £1 per 1,000 less than best.

	s. d.	
Thames Ballast	8 9	per yard, delivered.
Pit sand	11 0	
Thames Sand	12 0	" " "
Best Washed Sand	12 0	" " "
¾ in. Shingle for Ferro-Concrete	11 6	" " "

Per ton, delivered.	£ s. d.		£ s. d.
Best Portland Cement	2 10 0	..	2 13 0

Do. £2 6s. alongside in 80-ton lots.
Ferrocrete 2s. 6d. per ton extra on above.
Best Ground Blue Lias Lime 1 7 6 at rly. depot.
NOTE.—The cement or lime is exclusive of the ordinary charge for sacks.
Grey Stone Lime ..... 47s. 0d. per ton delivered.
Stourbridge Fireclay in s'cks 37s. 6d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	1 7
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	1 8½
Do. do. delivered on road waggons at Nine Elms Depot	1 9½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Westbourne Park, G.W.R., South Lambeth, G.W.R., or Nine Elms, or L. & S.W.R., per ft. cube	2 5½
Do. do. delivered on road waggons at Pimlico Wharf or Nine Elms Depot, per ft. cube	2 6½
White basebed, 2d. per ft. cube extra.	

RANDOM BLOCKS—Per Ft. Cube, delivered at Rly. Dpot.	s. d.		s. d.
Ancaster in blocks	2 0	Closeburn Red Freestone	2 2
Beer in blocks	1 7½	Red & White Mansfield random block	2 9
Grinshill in blocks	2 4		
Darley (Dale in blocks	2 5	Yellow Magnesian Limestone do. do	3 3

YORK STONE—*Robin Hood Quality.*

Per Ft. Cube, Delivered at Railway Depot	s. d.
Scappled random blocks	3 4
Per Ft. Super. Delivered at Railway Depot.	
6 in. sawn two sides landings to sizes (under 40 ft. super.)	2 5
4 in. rubbed two sides, ditto	2 8
3 in. sawn two sides slabs (random sizes)	1 0½
2 in. to 2½ in. sawn one side slabs (random sizes)	0 8½
1½ in. to 2 in. ditto, ditto	0 6½
HARD YORK—	
Per Ft. Cube, Delivered at Railway Depot.	
Scappled random blocks	3 0
Per Ft. Super., Delivered at Railway Depot.	
6 in. sawn two sides landing to sizes (under 40 ft. super.)	2 3
6 in. rubbed two sides ditto	2 7
3 in. sawn two sides slabs (random sizes)	1 0
2 in. self-faced random flags	0 5

TILES.

	Per 1,000 f.o.r. London. £ s. d.
Best machine-made tiles or hand-made sand-faced tiles from either Broseley or Staffordshire district	3 0 0
Ornamental ditto	3 2 6
Hip and valley tiles (per dozen)	0 6 0

SLATES.

		Per 1,000 of 1,200 f.o.r. London. £ s. d.
Best Blue Bangor Slates,	20 by 10	13 5 0
" "	16 by 8	6 12 6
First quality "	20 by 10	12 15 0
" "	16 by 8	6 10 0
Best Blue Portmadoc	20 by 10	13 5 0
" "	16 by 8	6 12 6
First quality "	20 by 10	12 12 6
" "	16 by 8	6 7 6

WOOD.

BEST BUILDING REDWOOD. Imported sizes.

Deals: 4 in. by 12 in., 4 in. by 11 in., 3 in. by 11 in., 4 in. by 9 in., and 2 in. by 11 in. ..... 3 in. by 9 in., 2½ in. by 9 in., and 2 in. by 9 in. .....

Softwood stocks controlled by the Director of Materials, consequently prices must be withdrawn

WOOD (*Continued*).

BEST BUILDING REDWOOD.

Battens: 2 in., 2½ in., and 3 in. by 8 in. .....
2 in., 2½ in., and 3 in. by 7 in. .....
2 in., 2½ in., and 3 in. by 6 in. .....
Scantlings: 2 in. by 3 in., 2 in. by 3½ in., 2 in. by 4 in., 2 in. by 4½ in. ....
3 in. by 4 in., and 3 in. by 4½ in. .....
Boards: 1 in., 1¼ in., and 1½ in. by 6 in. and 7 in.
⅞ in. .....
Seconds .....
Sawn pitch pine logs (about 35 cu. ft. average) .....
Do. 6 in. to 10 in. ..

Best Pitch Pine Deals ....
Under 2 in. thick .....

JOINERS' WOOD.

White Sea First Quality Red: 4 in. by 11 in. ..
3 in. by 11 in., and 2 in. by 11 in. .....
4 in. by 9 in. .....
3 in. by 9 in., and 2½ in. by 9 in. .....
3 in. by 11 in. boards ..
7 in. and 8 in. battens ..
7 in. and 8 in. boards ...
Archangel White Deals—
Best 3 in. by 9 in. and 10 in. and 11 in. .....
Seconds, do. .....
U.S. Battens .....
Prepared Floorings and Matchings. Seconds
Swedish Red and equal—
1¼ in. by 6½ in. planed and shot .....
1¼ in. by 6½ in. planed and matched .....
1 in. by 6½ in. planed and shot .....
1 in. by 6½ in. planed and matched .....
¾ in. by 6½ in. planed, matched, and beaded, or V jointed .....
1 in. by 6½ in. do. .....
Columbian or Oregon Pine, best quality .....
Yellow Pine—First regular sizes .....
Oddments .....
Seconds, regular sizes ..
Oddments .....
Kauri Pine—Planks per ft. cube.....

Softwood stocks controlled by the Director of Materials, consequently prices must be withdrawn.

Dry Wainscot Oak, per ft. super, as inch	0	1	0	..	0	1 6
⅔ in. do. do.	0	0	10	..	0	1 2
Dry Mahogany—Honduras, Tabasco, per ft. super, as inch	0	1	6	..	0	2 6
Cuba, Mahogany	0	1	6	..	0	2 6
Dry Walnut, American, per ft. super, as inch	0	1	6	..	0	2 6
French, "Italian," Walnut	0	1	6	..	0	2 6
Teak, per load (Rangoon or Moulmein)	30	0	0	..	40	0 0
Do. do. (Java)	30	0	0	..	40	0 0
American Whitewood planks, per ft. cube	0	8	6	..	0	10 0
Glue, per cwt.	5	0	0	..	5	5 0

METALS.

JOISTS, GIRDERS, &c.

Rolled Steel Joists, ordinary sections, basis price .....
Plain Compound Girders, ordinary sections .....
Plain Compound Stanchions
Angles, Tees, and Channels, ordinary sections .....
Flitch Plates .....
Cast Iron Columns and Stanchions, plain ordinary patterns .....

Prices controlled by the Ministry of Munitions.

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £4 net value delivered direct from works. 5 per cent. less carriage forward if sent from London stocks.)

	Tubes.		Fittings.
Gas	45	....	50
Water	40	....	47½
Steam	35	....	45
Galvanised gas	27½	....	42½
" water	18½	....	40
" steam	12½	....	37½

L.C.C. SOIL PIPE—

	Pipes Coated.			Bends.			Branches.	
	s.	d.		s.	d.		s.	d.
2 in. per yd.	2	8	....	2	1	each	2	6
2½ in. " ..	3	1	....	2	4	"	3	2
3 in. " ..	3	10	....	2	6	"	3	9
3½ in. " ..	4	2	....	3	2	"	4	4
4 in. " ..	4	8	....	3	6	"	5	0

RAIN-WATER PIPES, &c.

	Pipe.			Bends.			Branches.	
	s.	d.		s.	d.		s.	d.
2 in. per yd.	2	0	....	1	2	each	1	8
2½ in. " ..	2	2	....	1	5	"	2	0
3 in. " ..	2	6	....	1	9	"	2	6
3½ in. " ..	3	0	....	2	1	"	3	0
4 in. " ..	3	3	....	2	6	"	3	8

L.C.C. DRAIN PIPES,—9 ft. lengths. London Prices.
4 in., 5s. 3d. .. 5 in., 6s. 3d. .. 6 in., 7s. 6d.

METALS (*Continued*).

	Per ton in London. £ s. d.		£ s. d.
IRON—			
Common Bars	16 10 0	to	17 0 0
Staffordshire Crown Bars—good merchant quality	16 10 0	..	17 10 0
Staffordshire "Marked Bars"	17 10 0	..	18 0 0
Mild Steel Bars	19 0 0	..	19 10 0
Steel Bars, Ferro-Concrete quality, £19 basis price.			
Hoop Iron, basis price	20 0 0	..	20 10 0
" " Galvanised	33 0 0	..	—
(* And upwards, according to size and gauge.)			
Sheet Iron Black—			
Ordinary sizes to 20 g.	22 0 0	..	22 10 0
" " 24 g.	23 0 0	..	23 10 0
" " 26 g.	24 0 0	..	24 10 0
Sheet Iron, Galvanised flat, ordinary quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	32 0 0	..	—
Ordinary sizes to 22 g. and 24 g.	32 0 0	..	32 10 0
Ordinary sizes to 26 g.	35 0 0	..	35 10 0
Sheet Iron, Galvanised, flat, best quality—			
Ordinary sizes to 20 g.	35 0 0	..	—
" " 22 g. and 24 g.	35 10 0	..	—
Ordinary sizes to 26 g.	38 10 0	—	—
Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 8 ft. 20 g.	31 0 0	—	..
Ordinary sizes, 22 g. and 24 g.	31 10 0	..	—
Ordinary sizes, 26 g.	32 0 0	..	—
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	24 10 0	..	—
Best Soft Steel Sheets, 20 g. and 24 g.	24 15 0	..	—
Best Soft Steel Sheets, 26 g.	26 10 0	..	—
Cut Nails, 3 in. to 6 in.	26 0 0	..	27 0 0
(Under 3 in., usual trade extras.)			

LEAD, &c.

Delivered in London.	£ s. d.		
LEAD—Sheet, English, 4 lb. and up	28 10 0	..	—
Pipe in coils	30 0 0	..	—
Soil Pipe	42 0 0	..	—
Compo pipe	42 0 0	..	—

NOTE—Country delivery, 20s. per ton extra; lots under 5 cwt., 1s. 6d. per cwt. extra. Orders for over 1 cwt. should be accompanied by a certificate or licence, which can be obtained from the Director of Materials [A.N. 2 (E)], Hotel Victoria, S.W.
Allowance for old lead, £26 per ton.

COPPER—					
Strong Sheet ... per lb.	0	1	6	..	—
Thin " ... "	0	1	8	..	—
Copper nails ... "	0	1	6	..	—
Copper wire ... "	0	1	8	..	—
BRASS—					
Strong Sheet ... "	0	1	6	..	—
Thin " ... "	0	1	8	..	—
TIN—English Ingots "	0	2	6	..	—
SOLDER—Plumbers' "		1	1	..	—
Tinmen's ... "	0	1	5	..	—
Blowpipe ... "	0	1	7	..	—

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES AND IN SQUARES IN ORDINARY SIZES.

	Per Ft.		Per Ft.
15 oz. fourths ...	4¾d.	26 oz. thirds ...	7¼d.
" thirds ...	5½d.	32 " fourths ...	8d.
21 " fourths ...	5¾d.	" thirds ...	9d.
" thirds ...	6¾d.	Fluted Sheet, 15 oz.	6½d.
26 " fourths ...	6¾d.	" 21 "	7¾d.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
⅛ Rolled plate	4d.
⅛ Rough rolled and rough cast plate	4½d.
¼ Rough rolled and rough cast plate	4¾d.
Figured Rolled, Oxford Rolled Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish white	6d.
Ditto, tinted	7d.
Rolled Sheet	5d.
White Rolled Cathedral	5d.
Tinted do.	½d.

PAINTS, &c.

	£ s. d.
Raw Linseed Oil in pipes ... per gallon	0 5 2
" " " in barrels ... "	0 5 3
" " " in drums ... "	0 5 6
Boiled " " in barrels ... "	0 5 6
" " " in drums ... "	0 5 9
Turpentine in barrels ... "	0 4 8
" in drums ... "	0 4 11
Genuine Ground English White Lead, per ton	53 10 0
(In not less than 5 cwt. casks.)	
GENUINE WHITE LEAD PAINT—	
"Blackfriars," "Nine Elms," "Park," and other best brands (in 14 lb. tins) not less than 5 cwt. lots .. per ton delivered	69 0 0
Red Lead, Dry (packages extra) .. per ton	42 0 0

Orders for over 28 lb. of White Lead, White Lead Paint and Red Lead should be accompanied by a certificate or licence, which can be obtained from the Director of Materials [A.N. 2 (E.)], Hotel Victoria, S.W.

Best Linseed Oil Putty ...	per cwt.	0 14 0
Stockholm Tar ...	per gallon	0 3 6
Filocol ...	per cwt.	0 11 6

VARNISHES, &c.

	Per gallon. £ s. d.
Fine Pale Oak	0 8 0
Pale Copal Oak	0 10 0
Superfine Pale Elastic Oak	0 12 6
Fine Extra Hard Church Oak	0 10 6
Superfine Hard-drying Oak, for seats of Churches	0 14 0
Fine Elastic Carriage	0 12 6
Superfine Pale Elastic Carriage	0 16 0
Fine Pale Maple	0 10 0
Finest Pale Durable Copal	0 18 6
Extra Pale French Oil	1 1 0
Eggshell Flatting	0 18 0
White Pale Enamel	1 4 0
Extra Pale Paper	0 12 0
Best Japan Gold Size	0 10 0
Best Black Japan	0 16 0
Oak and Mahogany Stain	0 9 0
Brunswick Black	0 8 0
Berlin Black	0 16 0
Knotting	0 18 0
French and Brush Polish	0 12 0

TRADE CATALOGUES.

THE well-known B.R.C. Engineering Company, whose head offices are at 1, Dickinson-street, Manchester, and whose London offices are at 36, Lime-street, E.C., have issued one of the most attractive of trade books, which forms a model of the way in which such publications should be issued. It is well bound and printed on linenised paper, and the illustrations given show a large number of the buildings in which the Company's system has been used, through the medium of well-selected photographic views. The average architect consigns the average catalogue or price list to the waste-paper basket, unless he is in immediate want of it, because it is frequently cumbersome and uninteresting, but if the builders' manufacturers issued their catalogues in a uniform size and method they would be preserved for reference. Competing firms would lose nothing by such a practice and general trade would be increased.

The Company's system is too well known to need description here, being based on a mesh of parallel wires crossing one another at right angles securely welded at points of contact by a special electrical process, and the fabric is covered with a light coat of slacked lime to protect it from rust while in transit or lying in stock. The reinforcement is one of the easiest of all systems to handle or cut into shape, and requires less skilled knowledge to deal with it than most other systems. The tables published by the Company give the thickness of concrete and the sizes of the fabric required for varying loads and spans, and obviate the necessity for skilled assistance in dealing with ordinary constructional problems, a point of the greatest convenience and importance to the architect and the contractor.

Messrs. W. R. Pickup & Co., Ltd., of Horwich, Lancashire, issue a booklet giving particulars of their enamelled "Stonite" fireclay sanitary fittings, as to the excellence of which they have received numerous testimonials from over fifty architects and engineers. The ware is the product of specially selected, prepared and blended clays, and combines the greatest strength and rigidity; it is thoroughly vitrified, of even texture, covered with a close, vitreous and inseparable leadless glaze which is applied by a special process ensuring perfect cohesion between clay and enamel, and is subjected to an especially high temperature in tanning. The whole of the fittings of Whalley Asylum, costing more than £6,000, was supplied by the firm after a close examination of the comparative merits of other firms' productions. Whittington Asylum is another of the large institutional buildings in which Stonite fittings have been used. The various patterns of w.c., urinal and lavatory fittings illustrated are good of their kind, being simply and well designed. The firm does a large business in France from its depot in Paris, and have made every necessary arrangement for coping with the large increase of business which is expected after the war.

The Carron Company, of Stirlingshire, whose branch works are at Phoenix Foundry, Sheffield, and whose London offices are in Berners-street, give particulars of their "Carronest" Adaptable Fire, which forms an excellent type of barless grate, made to meet the wish for a combination of the old-fashioned fireplace on the hearth with the efficiency and economy of a modern grate. The form of fire leads to the economy of coal, because the full heating qualities of the fuel are utilised, the absence of bars allowing the heat to penetrate the room instead of concentrating it in the neighbourhood of the fireplace. The grate is a very cheap one and is made in three sizes to suit a 14-in., 16-in., and 18-in. opening, the cost being 10s., or, with a sheet-iron ashpan, 13s. 6d. After the removal of the bars of the existing grate, the front is simply placed in position and fixed to the existing bottom with two screws and wing nuts, the fret being then set in front. It can be fixed by anyone in a few minutes and can be taken away when moving. Like all the firm's goods, it is soundly and substantially made and well finished.

TRADE NEWS.

Boyle's latest patent "air-pump" ventilators, supplied by Messrs. Robert Boyle & Son, Ventilating Engineers, 64, Holborn-viaduct, London, have been employed at the Moor Park Hospital, Preston.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach us *not later than* 12 *noon on Wednesday*.

* Denotes *accepted*. † Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.

HOVE.—For external painting at the Connaught-road (Higher Grade) School, and the internal painting and other works at the Aldrington National School, Portland-road, Hove, for the Hove Borough T.C. Mr. H. H. Scott, Borough Surveyor, Town Hall, Hove:—

*A. W. Leney, Goldstone-villas, Hove	£129 15 0

LONDON.—For sundry decorative works and repairs at their infirmary, Marloes-road, for the Kensington B.G. Mr. E. Flint, 80, Coleman-street, E.C. 2:—

E. W. Holland & Co.	£740 0 0
A. Roberts & Co., Ltd.	445 0 0
T. W. Heath, Ltd.	427 10 0
J. Whitaker & Son, 195, Earl's Court-road, S.W.	414 12 6

NORWICH.—Supply of 3½ ton electric wagon for the Corporation:—

*Ransomes, Sims & Jeffries, Ipswich	£1,112

TO CORRESPONDENTS.

NOTE.—All communications with respect to literary and artistic matters should be addressed to "THE EDITOR" (and not to any person by name); those relating to advertisements and other exclusively business matters should be addressed to THE BUILDER, LTD., and *not* to the Editor.

All communications must be authenticated by the name and address of the sender, whether for publication or not. No notice can be taken of anonymous communications.

The responsibility of signed articles, letters, and papers read at meetings rests, of course, with the authors.

All drawings sent to or left at this office for consideration should bear the owner's name and address on either the face or back of the drawing. Delay and inconvenience may result from inattention to this.

We cannot undertake to return rejected communications; and the Editor cannot be responsible for drawings, photographs, manuscripts, or other documents, or for models or samples sent to or left at this office, unless he has specially asked for them.

N.B.—Illustrations of the First Premiated Design in any important architectural competition will always be accepted for publication by the Editor whether they have been formally asked for or not.

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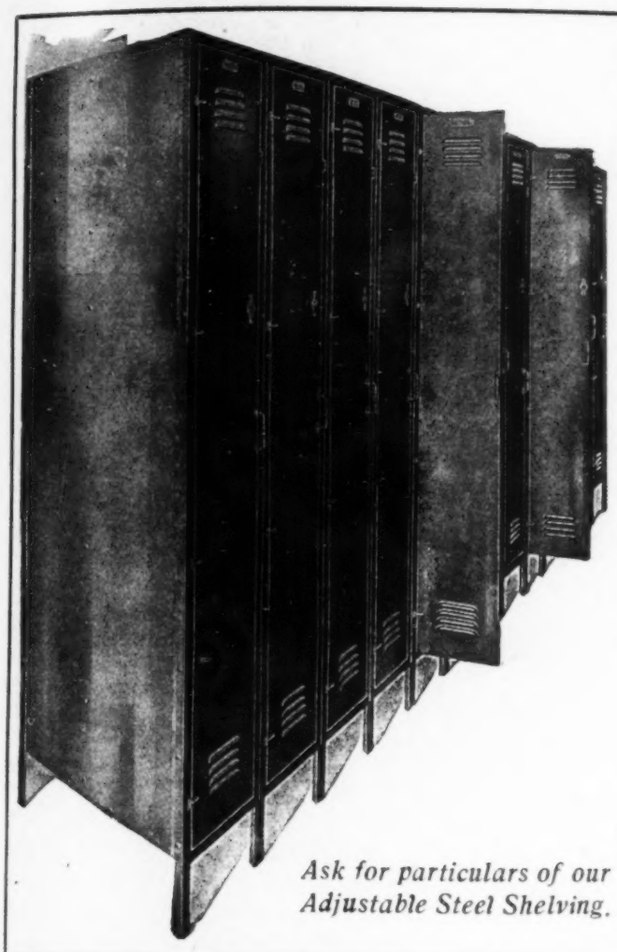

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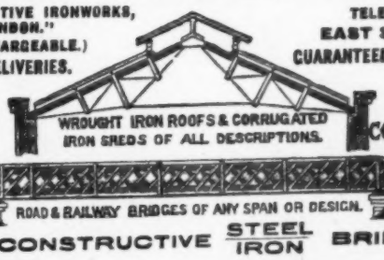

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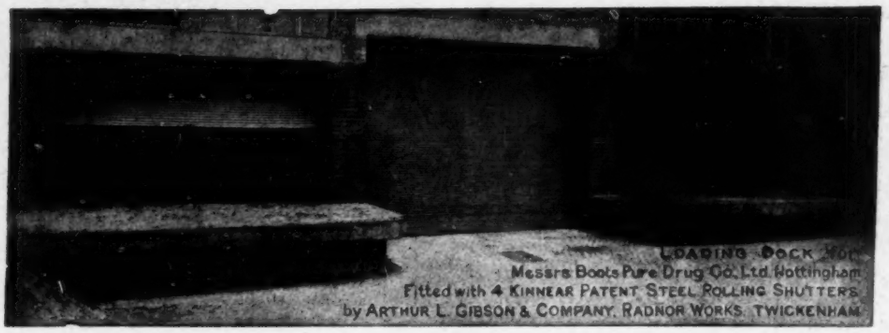

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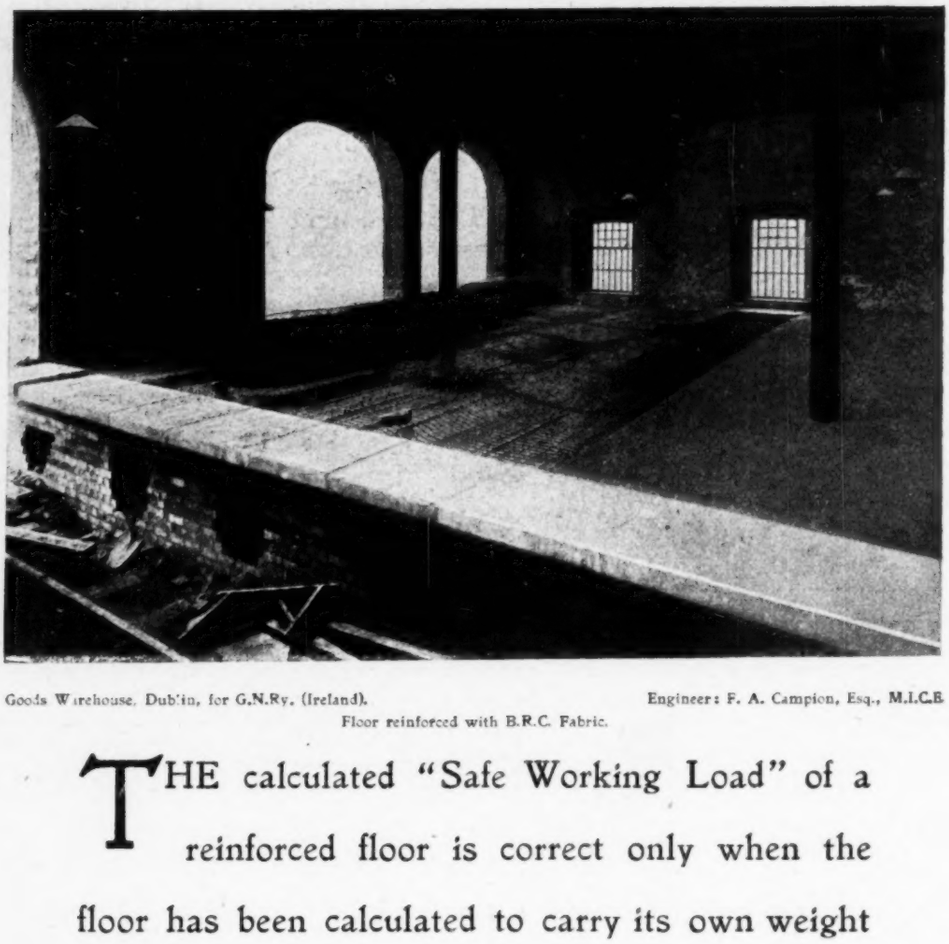

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